



**Memorandum**

**To:** Darren Levitt, Sea Breeze Properties  
**From:** James Westbrook, BlueScape Environmental  
**Date:** March 14, 2023  
**Subject:** Project Number PRJ-1059203: Update to the 2015 Air Quality Study for the Merge 56 Development for Proposed Changes to Unit 10

BlueScape Environmental (BlueScape) has conducted an updated air quality (AQ) study for the Merge 56 development (Project). The updated study is required by the City of San Diego (the "City") due to changes to the northern portion of the approved Project, referred to as Unit 10, after the Environmental Impact Report was approved in 2017.<sup>1</sup> This letter updates the 2015 Air Quality memo that Scientific Resources Associated (SRA) completed in December 2015.<sup>2</sup>

On November 9, 2022, the results of the AQ study were submitted to Sea Breeze Properties. In February 2023, some square footage changes, listed in the table below, were made to some of the elements of the Proposed Unit 10. As a result, the Proposed Unit 10 for construction and operational emissions were remodeled. This letter is an update to the November 9<sup>th</sup> letter, with modeling results using the updated square footages.

<b>Proposed Unit 10 – Updates to Square Footage</b>		
<b>Land Use</b>	<b>Previous Square Footage</b>	<b>Updated Square Footage</b>
Enclosed Parking w/Elevator	679,112	617,103
Unenclosed Parking w/Elevator	344,388	309,690
Hotel	146,000	131,031

The current Project design proposes the replacement of the Previously-Approved elements of Unit 10 with different land uses for the Proposed Unit 10. The Previously-Approved Unit 10 consisted of a movie theater, office space, a pharmacy, a hotel, retail space, affordable housing units, and a parking garage. The Proposed Unit 10

<sup>1</sup> Project Issues Report (PRJ-1059203), City of San Diego, September 13, 2022.  
<sup>2</sup> Merge 56 Project Air Emissions Memorandum, Scientific Resources Associated, December 1, 2015.

consists of Research & Development (R&D) facility buildings, a child care facility, a restaurant, a hotel, retail space, and a parking garage with under-building parking. Retail space would be decreased for the Proposed Unit 10, while the affordable housing units would remain at 47 dwelling units. While parking spaces would increase, the total number of trips per day would decrease with these revised land use types.

To conduct the AQ study, the California Emissions Estimator model (CalEEMod) v. 2020.4.0, was used to model construction and operational emissions from the Proposed Unit 10 and from the Previously-Approved Unit 10 portions of the Project. Emissions were then compared between the two versions of the Project.

### **CalEEMod Modeling Methods**

To evaluate air emissions from the construction and operation of Previously-Approved Unit 10 vs. Proposed Unit 10, CalEEMod v. 2020.4.0 was used. A newer version of CalEEMod, Version 2022.1, has been released since the November 9<sup>th</sup> letter was sent, but the 2020.4.0 version was used to remodel Proposed Unit 10 for consistency. Nevertheless, use of the newer version would not be expected to change the conclusions in this report.

Emissions from construction of both the Previously-Approved Unit 10 and the Proposed Unit 10 were based on the construction schedule in Table 1. Grading of the Project Site for Unit 10 has already been mostly completed to date, but a grading construction phase is included in CalEEMod to account for fine grading of the site prior to building construction. The amounts and types of construction equipment for both versions of Unit 10 were the same.

<b>Table 1. Construction Schedule</b>			
<b>Construction Phase</b>	<b>Start Date</b>	<b>End Date</b>	<b>Total Number of Days</b>
Grading	4/3/23	5/12/23	30
Building Construction	5/15/23	7/5/24	300
Paving	7/8/24	8/2/24	20
Architectural Coating	8/5/24	11/20/24	78

Emissions from operation of both the Previously-Approved and the Proposed Project include vehicle emissions, area source emissions, and energy use emissions. The Proposed Unit 10 operations also include the use of three (3) 2,180 kW diesel-fueled emergency engines and twenty-one (21) 2 MMBtu/hr boilers in the three R&D laboratory buildings, that will be used for comfort heating. In the Proposed Unit 10 CalEEMod runs, the three emergency engines were added to the "Stationary Sources: Emergency Generators and Fire Pumps" section, with the assumption that they would

be permitted to run 1 hour/day and 50 hours/year for testing and maintenance. The boilers were added to the "Stationary Sources: User Defined" section in CalEEMod to show compliance with SDAPCD Rule 69.2.1, which limits NO<sub>x</sub> and CO emissions from new boilers, process heaters, steam generators, and large water heaters. Because natural gas usage for comfort heating is also included by default in the "Operational: Energy Use" section of CalEEMod, the Title 24 Natural Gas Energy Intensity for the R&D buildings was set to 0 kBTU/size/year, to avoid "double-counting" the boiler emissions.

Average daily trips (ADTs) entered into CalEEMod for the Previously-Approved Unit 10 modeling are from the 2015 Linscott, Law & Greenspan Traffic Impact Analysis that was conducted for the original Environmental Impact Report. ADTs entered into CalEEMod for the Proposed Unit 10 modeling are from the *Merge 56 Traffic Generation, Approved vs. Proposed Project* memorandum.<sup>3</sup> Trip reductions have not been taken into account, as mixed-use reduction is not applicable to projects proposing less than 100,000 sf commercial retail.

Modeled daily and annual emissions are compared with significance thresholds from the City of San Diego Significance Determination Thresholds.<sup>4</sup> Output files from CalEEMod are attached to this memo.

### **Construction Emissions**

Tables 2 and 3 present the modeled daily and annual construction emissions for the Previously-Approved Unit 10 and the Proposed Unit 10, with a comparison of the construction emissions with the City's significance thresholds, and a net emissions comparison between the Proposed and Previously-Approved versions of Unit 10.

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<sup>3</sup> *Merge 56 Traffic Generation, Approved vs. Proposed Project, Plus Access Analysis for PDP Amendment* memorandum, Urban Systems Associates, Inc., October 4, 2022.

<sup>4</sup> CEQA Significance Determination Thresholds, City of San Diego, December 2020. Available at: <https://www.sandiego.gov/sites/default/files/sdtceqa.pdf>

<b>Table 2. Construction Daily Emissions</b>						
<b>Project Design</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Construction Emissions, lbs/day</b>						
Previously-Approved Unit 10 Maximum Daily Emissions <sup>1</sup>	40.2	34.6	31.0	0.10	6.11	2.66
Proposed Unit 10 Maximum Daily Emissions <sup>1</sup>	47.3	34.6	40.2	0.15	9.50	3.12
<b>Significance Criteria</b>	<b>137</b>	<b>250</b>	<b>550</b>	<b>250</b>	<b>100</b>	<b>55<sup>2</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Net Construction Emissions (Proposed – Previously-Approved), lbs/day</b>						
Total Net Daily Emissions	+7.1	0	+9.2	+0.05	+3.39	+0.46

<sup>1</sup> Based on CalEEMod. Maximum daily emissions are calculated for each pollutant separately and may not occur on the same day for each pollutant.

<sup>2</sup> Because the City has not adopted a threshold for PM<sub>2.5</sub>, the South Coast Air Quality Management District threshold was used.

While daily construction emissions of most of the criteria pollutants increase due the Proposed Unit 10 land use changes, the maximum daily construction emissions of these pollutants are still well below the City’s daily emissions significance threshold.

<b>Table 3. Construction Annual Emissions</b>						
<b>Project Design</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Construction Emissions, tons/year</b>						
Previously-Approved Unit 10 Maximum Annual Emissions	1.78	2.50	2.94	0.009	0.56	0.22
Proposed Unit 10 Maximum Annual Emissions	2.12	3.01	3.67	0.013	0.83	0.29
<b>Significance Criteria</b>	<b>15</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>15</b>	<b>10<sup>1</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Net Construction Emissions (Proposed – Previously-Approved), tons/year</b>						
Total Net Annual Emissions	+0.34	+0.51	+0.73	+0.004	+0.27	+0.07

<sup>1</sup> Because the City has not adopted a threshold for PM<sub>2.5</sub>, the South Coast Air Quality Management District threshold was used.

As shown in Table 3, annual construction emissions of all six criteria pollutants for the Proposed Unit 10 are higher than the annual construction emissions for the

Previously-Approved Unit 10, but still remain well below the City’s annual emissions significance thresholds.

**Operational Emissions**

Tables 4 and 5 present a comparison of the modeled daily and annual operational emissions for the Previously-Approved Unit 10 and Proposed Unit 10 and with the City’s significance thresholds, and a net emissions comparison between the Proposed and Previously-Approved versions of Unit 10.

<b>Table 4. Operational Daily Emissions</b>						
<b>Source</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Previously-Approved Unit 10 Max. Daily Emissions, lb/day</b>						
Area Sources	14.4	0.05	4.08	0.0002	0.02	0.02
Energy Use	0.48	4.34	3.59	0.03	0.33	0.33
Mobile Emissions	35.8	33.2	289	0.58	64.3	17.4
Stationary Sources	0	0	0	0	0	0
<b>Total</b>	<b>50.7</b>	<b>37.6</b>	<b>297</b>	<b>0.60</b>	<b>64.6</b>	<b>17.8</b>
<b>Significance Criteria</b>	<b>137</b>	<b>250</b>	<b>550</b>	<b>250</b>	<b>100</b>	<b>55<sup>1</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Proposed Unit 10 Max. Daily Emissions, lb/day</b>						
Area Sources	19.8	0.05	4.07	0.0002	0.02	0.02
Energy Use	0.45	4.08	3.38	0.025	0.31	0.31
Mobile Emissions	18.9	16.2	142	0.26	29.1	7.89
Stationary Sources	8.83	89.2	120	0.66	9.63	9.63
<b>Total</b>	<b>48.0</b>	<b>110</b>	<b>269</b>	<b>0.95</b>	<b>39.1</b>	<b>17.9</b>
<b>Significance Criteria</b>	<b>137</b>	<b>250</b>	<b>550</b>	<b>250</b>	<b>100</b>	<b>55<sup>1</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Net Unit 10 Max. Daily Emissions (Proposed – Previously-Approved), lb/day</b>						
<b>Total Net Daily Emissions</b>	<b>-2.7</b>	<b>+72.4</b>	<b>-28</b>	<b>+0.35</b>	<b>-25.5</b>	<b>+0.1</b>

<sup>1</sup> Emissions shown are the higher of the summer and winter maximum daily emissions. See attached CalEEMod output files.

<sup>2</sup> Because the City has not adopted a threshold for PM<sub>2.5</sub>, the South Coast Air Quality Management District threshold was used.

Table 4 shows a decrease in daily operational emissions of ROG, CO, and PM<sub>10</sub>. The increases in daily NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub> emissions are mostly due to the addition of stationary sources in the Proposed Unit 10. While the maximum daily operational emissions of NO<sub>x</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub> increase due to the Proposed Unit 10 land use changes, they are still well below the City's daily emissions significance thresholds.

<b>Table 5. Operational Annual Emissions</b>						
<b>Source</b>	<b>ROG</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>2</sub></b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>
<b>Previously-Approved Unit 10 Annual Emissions, tons/year</b>						
Area Sources	2.61	0.004	0.37	0.00002	0.002	0.002
Energy Use	0.09	0.79	0.66	0.005	0.06	0.06
Mobile Emissions	6.16	5.97	51.3	0.10	11.4	3.10
Stationary Sources	0	0	0	0	0	0
<b>Total</b>	<b>8.86</b>	<b>6.76</b>	<b>52.4</b>	<b>0.11</b>	<b>11.5</b>	<b>3.16</b>
<b>Significance Criteria</b>	<b>15</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>15</b>	<b>10<sup>1</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Proposed Unit 10 Annual Emissions, tons/year</b>						
Area Sources	3.60	0.004	0.37	0.00002	0.002	0.002
Energy Use	0.08	0.75	0.62	0.004	0.06	0.06
Mobile Emissions	3.23	2.90	25.0	0.05	5.17	1.41
Stationary Sources	1.08	6.14	16.1	0.11	1.42	1.42
<b>Total</b>	<b>7.99</b>	<b>9.79</b>	<b>42.1</b>	<b>0.16</b>	<b>6.65</b>	<b>2.89</b>
<b>Significance Criteria</b>	<b>15</b>	<b>40</b>	<b>100</b>	<b>40</b>	<b>15</b>	<b>10<sup>1</sup></b>
<b>Significant?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Net Unit 10 Annual Emissions (Proposed – Previously-Approved), tons/year</b>						
<b>Total Net Annual Emissions</b>	<b>-0.87</b>	<b>+3.03</b>	<b>-10.3</b>	<b>+0.05</b>	<b>-4.85</b>	<b>-0.27</b>

<sup>1</sup> Because the City has not adopted a threshold for PM<sub>2.5</sub>, the South Coast Air Quality Management District threshold was used.

As shown in Table 5, the annual operational emissions of ROG, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> are all lower than they are for the Previously-Approved Project. Annual operational emissions of NO<sub>x</sub> and SO<sub>2</sub> for the Proposed Unit 10 are higher than the annual operational emissions of NO<sub>x</sub> and SO<sub>2</sub> for the Previously-Approved Unit 10, but still

remain well below the City's annual emissions significance thresholds. The increases in NO<sub>x</sub> and SO<sub>2</sub> emissions are mostly due to the addition of the stationary sources to the Proposed Unit 10.

### **Conclusions**

Daily and annual construction emissions of all of the criteria pollutants analyzed increase for the Proposed Project, but they are still well below the City's significance thresholds.

Daily and annual operational emissions of ROG, CO, and PM<sub>10</sub> are reduced due to the Proposed Project. Daily operational emissions of PM<sub>2.5</sub> are slightly higher for the Proposed Project than they are for the Previously-Approved Project, but annual operational emissions of PM<sub>2.5</sub> are reduced. Daily and annual operational emissions of NO<sub>x</sub> and SO<sub>2</sub> are higher due to the addition of the stationary sources to the Proposed Project. However, all of the operational criteria pollutant emissions remain well below the City's significance thresholds.

Therefore, no significant air quality impact would result from construction or operation of the Proposed Unit 10.

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**Merge 56 Unit 10 (Previously Approved)**

San Diego County APCD Air District, Summer

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	240.50	1000sqft	0.70	240,500.00	0
Pharmacy/Drugstore w/o Drive Thru	15.00	1000sqft	0.34	15,000.00	0
Enclosed Parking with Elevator	1,100.00	Space	2.58	440,000.00	0
Parking Lot	388.00	Space	1.81	155,200.00	0
Hotel	120.00	Room	0.31	174,240.00	0
Movie Theater (No Matinee)	45.45	1000sqft	1.04	45,453.00	0
Apartments Low Rise	47.00	Dwelling Unit	1.78	47,000.00	134
Regional Shopping Center	85.08	1000sqft	1.95	85,080.00	0
Strip Mall	9.00	1000sqft	0.21	9,000.00	0

**1.2 Other Project Characteristics**

Urbanization Urban Wind Speed (m/s) 26 Precipitation Freq (Days) 40  
 Climate Zone 13 Operational Year 2026

Utility Company San Diego Gas & Electric

CO2 Intensity 539.98 CH4 Intensity 0.033 N2O Intensity 0.004  
 (lb/MW/hr) (lb/MW/hr) (lb/MW/hr)

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

Project Characteristics -

Land Use - Per 2015 report

Construction Phase - Modeled same construction schedule as for Proposed Unit 10.

Trips and VMT -



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

Grading - Assume fine grading over entire 10.72 acres.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - Trip generation rates per size from 2015 report used.

Woodstoves - No hearths or woodstoves in Unit 10 apartments per 2015 report.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	78.00
tblFireplaces	FireplacedayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00

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

tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tb\Grading	AcresoOfGrading	90.00	10.72
tb\LandUse	LandUseSquareFeet	45,450.00	45,453.00
tb\LandUse	LotAcreage	5.52	0.70
tb\LandUse	LotAcreage	9.90	2.58
tb\LandUse	LotAcreage	3.49	1.81
tb\LandUse	LotAcreage	4.00	0.31
tb\LandUse	LotAcreage	2.94	1.78
tb\VehicleTrips	ST_TR	8.14	6.00
tb\VehicleTrips	ST_TR	2.21	12.95
tb\VehicleTrips	ST_TR	8.19	8.00
tb\VehicleTrips	ST_TR	99.32	80.00
tb\VehicleTrips	ST_TR	90.08	90.00
tb\VehicleTrips	ST_TR	46.12	70.00
tb\VehicleTrips	ST_TR	42.04	100.00
tb\VehicleTrips	SU_TR	6.28	6.00
tb\VehicleTrips	SU_TR	0.70	12.95
tb\VehicleTrips	SU_TR	5.95	8.00
tb\VehicleTrips	SU_TR	81.93	80.00
tb\VehicleTrips	SU_TR	90.08	90.00
tb\VehicleTrips	SU_TR	21.10	70.00
tb\VehicleTrips	SU_TR	20.43	100.00
tb\VehicleTrips	WD_TR	7.32	6.00
tb\VehicleTrips	WD_TR	9.74	12.95
tb\VehicleTrips	WD_TR	8.36	8.00
tb\VehicleTrips	WD_TR	78.09	80.00

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

tbVehicleTrips	WD_TR	90.08	90.00
tbVehicleTrips	WD_TR	37.75	70.00
tbVehicleTrips	WD_TR	44.32	100.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

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

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	3,3764	34,5495	30,9834	0.1025	6,5653	1,4254	7,9907	3,3947	1,3113	4,7061						
2024	40,1527	22,5332	30,0497	0.1006	5,3363	0,6852	6,0215	1,4455	0,6449	2,0904						
Maximum	40,1527	34,5495	30,9834	0.1025	6,5653	1,4254	7,9907	3,3947	1,3113	4,7061						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	3,3764	34,5495	30,9834	0.1025	5,3362	1,4254	6,1087	1,4455	1,3113	2,6619						
2024	40,1527	22,5332	30,0497	0.1006	5,3363	0,6852	6,0215	1,4455	0,6449	2,0904						
Maximum	40,1527	34,5495	30,9834	0.1025	5,3363	1,4254	6,1087	1,4455	1,3113	2,6619						



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**2.2 Overall Operational**

**Unmitigated Operational**

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																
Area	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Mobile	35.7943	30.6138	276.0724	0.5755	63.8465	0.4393	64.2858	17.0069	0.4094	17.4163						
<b>Total</b>	<b>50.6554</b>	<b>34.9989</b>	<b>283.7411</b>	<b>0.6018</b>	<b>63.8465</b>	<b>0.7918</b>	<b>64.6384</b>	<b>17.0069</b>	<b>0.7620</b>	<b>17.7689</b>						

**Mitigated Operational**

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																
Area	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Mobile	35.7943	30.6138	276.0724	0.5755	63.8465	0.4393	64.2858	17.0069	0.4094	17.4163						
<b>Total</b>	<b>50.6554</b>	<b>34.9989</b>	<b>283.7411</b>	<b>0.6018</b>	<b>63.8465</b>	<b>0.7918</b>	<b>64.6384</b>	<b>17.0069</b>	<b>0.7620</b>	<b>17.7689</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30		
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300		
3	Paving	Paving	7/8/2024	8/2/2024	5	20		
4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78		

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.72

Acres of Paving: 4.39

Residential Indoor: 95,175; Residential Outdoor: 31,725; Non-Residential Indoor: 853,910; Non-Residential Outdoor: 284,637; Striped Parking Area: 35,712 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	488,00	196,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Paving	6	15,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	98,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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																
Fugitive Dust					6.4010	0.0000	6.4010	3.3512	0.0000	3.3512						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>6.4010</b>	<b>1.4245</b>	<b>7.8255</b>	<b>3.3512</b>	<b>1.3105</b>	<b>4.6617</b>						

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0547	0.0339	0.4800	1.4500e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0547</b>	<b>0.0339</b>	<b>0.4800</b>	<b>1.4500e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.2 Grading - 2023**

**Mitigated Construction On-Site**

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																
Fugitive Dust					2.4964	0.0000	2.4964	1.3070	0.0000	1.3070						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>2.4964</b>	<b>1.4245</b>	<b>3.9209</b>	<b>1.3070</b>	<b>1.3105</b>	<b>2.6175</b>						

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0547	0.0339	0.4800	1.4500e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0547</b>	<b>0.0339</b>	<b>0.4800</b>	<b>1.4500e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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															
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

**Unmitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2341	8.4021	3.0279	0.0401	1.3274	0.0512	1.3786	0.3822	0.0490	0.4311						
Worker	1.3336	0.8282	11.7115	0.0354	4.0088	0.0215	4.0303	1.0633	0.0198	1.0831						
<b>Total</b>	<b>1.5677</b>	<b>9.2302</b>	<b>14.7394</b>	<b>0.0756</b>	<b>5.3362</b>	<b>0.0727</b>	<b>5.4089</b>	<b>1.4455</b>	<b>0.0688</b>	<b>1.5142</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

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															
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

**Mitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2341	8.4021	3.0279	0.0401	1.3274	0.0512	1.3786	0.3822	0.0490	0.4311						
Worker	1.3336	0.8282	11.7115	0.0354	4.0088	0.0215	4.0303	1.0633	0.0198	1.0831						
<b>Total</b>	<b>1.5677</b>	<b>9.2302</b>	<b>14.7394</b>	<b>0.0756</b>	<b>5.3362</b>	<b>0.0727</b>	<b>5.4089</b>	<b>1.4455</b>	<b>0.0688</b>	<b>1.5142</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>						

**Unmitigated Construction Off-Site**

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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2285	8.3448	2.9571	0.0394	1.3275	0.0515	1.3789	0.3822	0.0492	0.4314						
Worker	1.2522	0.7446	10.9258	0.0343	4.0088	0.0205	4.0293	1.0633	0.0188	1.0822						
<b>Total</b>	<b>1.4777</b>	<b>9.0894</b>	<b>13.8829</b>	<b>0.0736</b>	<b>5.3363</b>	<b>0.0719</b>	<b>5.4082</b>	<b>1.4455</b>	<b>0.0680</b>	<b>1.5135</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

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															
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>						

**Mitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2295	8.3448	2.9571	0.0394	1.3275	0.0515	1.3789	0.3822	0.0492	0.4314						
Worker	1.2522	0.7446	10.9258	0.0343	4.0088	0.0205	4.0293	1.0633	0.0188	1.0822						
<b>Total</b>	<b>1.4777</b>	<b>9.0894</b>	<b>13.8829</b>	<b>0.0736</b>	<b>5.3363</b>	<b>0.0719</b>	<b>5.4082</b>	<b>1.4455</b>	<b>0.0680</b>	<b>1.5135</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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															
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.2371					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.2253</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

**Unmitigated Construction Off-Site**

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															
Hauling	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						
Worker	0.0385	0.0229	0.3358	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0385</b>	<b>0.0229</b>	<b>0.3358</b>	<b>1.0500e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.4 Paving - 2024**

**Mitigated Construction On-Site**

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															
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.2371					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.2253</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

**Mitigated Construction Off-Site**

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															
Hauling	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						
Worker	0.0385	0.0229	0.3358	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0385</b>	<b>0.0229</b>	<b>0.3358</b>	<b>1.0500e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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																
Archit. Coating	39.7205				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609	0.0609	0.0609	0.0609						
<b>Total</b>	<b>39.9013</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>						

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.2515	0.1495	2.1941	6.8800e-003	0.8051	4.1100e-003	0.8092	0.2135	3.7800e-003	0.2173						
<b>Total</b>	<b>0.2515</b>	<b>0.1495</b>	<b>2.1941</b>	<b>6.8800e-003</b>	<b>0.8051</b>	<b>4.1100e-003</b>	<b>0.8092</b>	<b>0.2135</b>	<b>3.7800e-003</b>	<b>0.2173</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction On-Site**

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																
Archit. Coating	39.7205				0.0000	0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609		0.0609	0.0609						
<b>Total</b>	<b>39.9013</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>						

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.2515	0.1495	2.1941	6.8800e-003	0.8051	4.1100e-003	0.8092	0.2135	3.7800e-003	0.2173						
<b>Total</b>	<b>0.2515</b>	<b>0.1495</b>	<b>2.1941</b>	<b>6.8800e-003</b>	<b>0.8051</b>	<b>4.1100e-003</b>	<b>0.8092</b>	<b>0.2135</b>	<b>3.7800e-003</b>	<b>0.2173</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	35,7943	30,6138	276,0724	0,5755	63,8465	0,4393	64,2858	17,0069	0,4094	17,4163						
Unmitigated	35,7943	30,6138	276,0724	0,5755	63,8465	0,4393	64,2858	17,0069	0,4094	17,4163						

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Annual VMT	
	Weekday	Saturday	Sunday	Unmitigated	Mitigated
Apartment Low Rise	282,00	282,00	282,00	805,196	805,196
Enclosed Parking with Elevator	0,00	0,00	0,00		
General Office Building	3,114,48	3,114,48	3,114,48	7,442,825	7,442,825
Hotel	960,00	960,00	960,00	1,823,934	1,823,934
Movie Theater (No Matinee)	3,636,00	3,636,00	3,636,00	6,846,578	6,846,578
Parking Lot	0,00	0,00	0,00		
Pharmacy/Drugstore w/o Drive Thru	1,350,00	1,350,00	1,350,00	1,584,613	1,584,613
Regional Shopping Center	5,955,60	5,955,60	5,955,60	10,441,982	10,441,982
Strip Mall	900,00	900,00	900,00	1,386,030	1,386,030
<b>Total</b>	<b>16,198,08</b>	<b>16,198,08</b>	<b>16,198,08</b>	<b>30,331,157</b>	<b>30,331,157</b>

**4.3 Trip Type Information**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Pharmacy/Drugstore w/o Drive	9.50	7.30	7.30	7.40	73.60	19.00	41	6	53
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
General Office Building	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Movie Theater (No Matinee)	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Parking Lot	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Pharmacy/Drugstore w/o Drive	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Regional Shopping Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

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																
Natural Gas Mitigated	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Natural Gas Unmitigated	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

Land Use	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
	kBTU/yr					lb/day											
Apartments Low Rise	1402.83	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
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						
General Office Building	13197.8	0.1423	1.2939	1.0869	7.7600e-003	0.0983	0.0983	0.0983	0.0983	0.0983	0.0983						
Hotel	27639.7	0.2981	2.7098	2.2762	0.0163	0.2059	0.2059	0.2059	0.2059	0.2059	0.2059						
Movie Theater (No Matinee)	1434.57	0.0155	0.1406	0.1181	8.4000e-004	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Pharmacy/Drugstore w/o Drive Thru	91.2329	9.8000e-004	8.9400e-003	7.5100e-003	5.0000e-005	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004						
Regional Shopping Center	517.473	5.5800e-003	0.0507	0.0426	3.0000e-004	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003						
Strip Mall	54.7397	5.9000e-004	5.3700e-003	4.5100e-003	3.0000e-005	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004						
<b>Total</b>		<b>0.4782</b>	<b>4.3387</b>	<b>3.5909</b>	<b>0.0261</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	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
	kBTU/yr					lb/day								lb/day			
Apartments Low Rise	1.40283	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
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						
General Office Building	13.1978	0.1423	1.2939	1.0869	7.7600e-003	0.0983	0.0983	0.0983	0.0983	0.0983	0.0983						
Hotel	27.6397	0.2981	2.7098	2.2762	0.0163	0.2059	0.2059	0.2059	0.2059	0.2059	0.2059						
Movie Theater (No Matinee)	1.43457	0.0155	0.1406	0.1181	8.4000e-004	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Pharmacy/Drugstore w/o Drive Thru	0.0912329	9.8000e-004	8.9400e-003	7.5100e-003	5.0000e-005	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004						
Regional Shopping Center	0.517473	5.5800e-003	0.0507	0.0426	3.0000e-004	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003						
Strip Mall	0.0547397	5.9000e-004	5.3700e-003	4.5100e-003	3.0000e-005	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004						
<b>Total</b>		<b>0.4782</b>	<b>4.3387</b>	<b>3.5909</b>	<b>0.0261</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>						

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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															
Mitigated	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Unmitigated	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**6.2 Area by SubCategory**

**Unmitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.8488					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.3991					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						
Landscaping	0.1351	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>14.3830</b>	<b>0.0465</b>	<b>4.0779</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						
	lb/day															

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.8488					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.3991					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						
Landscaping	0.1351	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>14.3830</b>	<b>0.0465</b>	<b>4.0779</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Summer

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

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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**11.0 Vegetation**

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**Merge 56 Unit 10 (Previously Approved)**

San Diego County APCD Air District, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	240.50	1000sqft	0.70	240,500.00	0
Pharmacy/Drugstore w/o Drive Thru	15.00	1000sqft	0.34	15,000.00	0
Enclosed Parking with Elevator	1,100.00	Space	2.58	440,000.00	0
Parking Lot	388.00	Space	1.81	155,200.00	0
Hotel	120.00	Room	0.31	174,240.00	0
Movie Theater (No Matinee)	45.45	1000sqft	1.04	45,453.00	0
Apartments Low Rise	47.00	Dwelling Unit	1.78	47,000.00	134
Regional Shopping Center	85.08	1000sqft	1.95	85,080.00	0
Strip Mall	9.00	1000sqft	0.21	9,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	26	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2026		

Utility Company San Diego Gas & Electric

CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per 2015 report

Construction Phase - Modeled same construction schedule as for Proposed Unit 10.

Trips and VMT -

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

Grading - Assume fine grading over entire 10.72 acres.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - Trip generation rates per size from 2015 report used.

Woodstoves - No hearths or woodstoves in Unit 10 apartments per 2015 report.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	78.00
tblFireplaces	FireplacedayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00

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

tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tbGrading	AcresoGrading	90.00	10.72
tbLandUse	LandUseSquareFeet	45,450.00	45,453.00
tbLandUse	LotAcreage	5.52	0.70
tbLandUse	LotAcreage	9.90	2.58
tbLandUse	LotAcreage	3.49	1.81
tbLandUse	LotAcreage	4.00	0.31
tbLandUse	LotAcreage	2.94	1.78
tbVehicleTrips	ST_TR	8.14	6.00
tbVehicleTrips	ST_TR	2.21	12.95
tbVehicleTrips	ST_TR	8.19	8.00
tbVehicleTrips	ST_TR	99.32	80.00
tbVehicleTrips	ST_TR	90.08	90.00
tbVehicleTrips	ST_TR	46.12	70.00
tbVehicleTrips	ST_TR	42.04	100.00
tbVehicleTrips	SU_TR	6.28	6.00
tbVehicleTrips	SU_TR	0.70	12.95
tbVehicleTrips	SU_TR	5.95	8.00
tbVehicleTrips	SU_TR	81.93	80.00
tbVehicleTrips	SU_TR	90.08	90.00
tbVehicleTrips	SU_TR	21.10	70.00
tbVehicleTrips	SU_TR	20.43	100.00
tbVehicleTrips	WD_TR	7.32	6.00
tbVehicleTrips	WD_TR	9.74	12.95
tbVehicleTrips	WD_TR	8.36	8.00
tbVehicleTrips	WD_TR	78.09	80.00

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

tbVehicleTrips	WD_TR	90.08	90.00
tbVehicleTrips	WD_TR	37.75	70.00
tbVehicleTrips	WD_TR	44.32	100.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

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

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	3,381.0	34,553.8	30,492.0	0.1006	6,565.3	1,425.4	7,990.7	3,394.7	1,311.3	4,706.1						
2024	40,174.6	22,977.8	29,617.4	0.0988	5,336.3	0,685.4	6,021.7	1,445.5	0,645.2	2,090.6						
<b>Maximum</b>	<b>40,174.6</b>	<b>34,553.8</b>	<b>30,492.0</b>	<b>0.1006</b>	<b>6,565.3</b>	<b>1,425.4</b>	<b>7,990.7</b>	<b>3,394.7</b>	<b>1,311.3</b>	<b>4,706.1</b>						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	3,381.0	34,553.8	30,492.0	0.1006	5,336.2	1,425.4	6,108.9	1,445.5	1,311.3	2,661.9						
2024	40,174.6	22,977.8	29,617.4	0.0988	5,336.3	0,685.4	6,021.7	1,445.5	0,645.2	2,090.6						
<b>Maximum</b>	<b>40,174.6</b>	<b>34,553.8</b>	<b>30,492.0</b>	<b>0.1006</b>	<b>5,336.3</b>	<b>1,425.4</b>	<b>6,108.9</b>	<b>1,445.5</b>	<b>1,311.3</b>	<b>2,661.9</b>						





Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**2.2 Overall Operational**

**Unmitigated Operational**

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																
Area	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Mobile	34.4964	33.2206	289.2648	0.5509	63.8465	0.4395	64.2861	17.0069	0.4097	17.4166						
<b>Total</b>	<b>49.3576</b>	<b>37.6057</b>	<b>296.9335</b>	<b>0.5772</b>	<b>63.8465</b>	<b>0.7921</b>	<b>64.6386</b>	<b>17.0069</b>	<b>0.7623</b>	<b>17.7691</b>						

**Mitigated Operational**

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																
Area	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Mobile	34.4964	33.2206	289.2648	0.5509	63.8465	0.4395	64.2861	17.0069	0.4097	17.4166						
<b>Total</b>	<b>49.3576</b>	<b>37.6057</b>	<b>296.9335</b>	<b>0.5772</b>	<b>63.8465</b>	<b>0.7921</b>	<b>64.6386</b>	<b>17.0069</b>	<b>0.7623</b>	<b>17.7691</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30	
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300	
3	Paving	Paving	7/8/2024	8/2/2024	5	20	
4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.72

Acres of Paving: 4.39

Residential Indoor: 95,175; Residential Outdoor: 31,725; Non-Residential Indoor: 853,910; Non-Residential Outdoor: 284,637; Striped Parking Area: 35,712 (Architectural Coating – sqft)

**OffRoad Equipment**

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	488,00	196,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Paving	6	15,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	98,00	0,00	0,00	10,80	7,30	20,00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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																
Fugitive Dust					6.4010	0.0000	6.4010	3.3512	0.0000	3.3512						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>6.4010</b>	<b>1.4245</b>	<b>7.8255</b>	<b>3.3512</b>	<b>1.3105</b>	<b>4.6617</b>						

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0593	0.0382	0.4561	1.3700e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0593</b>	<b>0.0382</b>	<b>0.4561</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.2 Grading - 2023**

**Mitigated Construction On-Site**

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																
Fugitive Dust					2.4964	0.0000	2.4964	1.3070	0.0000	1.3070						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>2.4964</b>	<b>1.4245</b>	<b>3.9209</b>	<b>1.3070</b>	<b>1.3105</b>	<b>2.6175</b>						

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0593	0.0382	0.4561	1.3700e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0593</b>	<b>0.0382</b>	<b>0.4561</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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															
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

**Unmitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2276	8.7556	3.1193	0.0402	1.3274	0.0514	1.3789	0.3822	0.0492	0.4314						
Worker	1.4461	0.9313	11.1287	0.0335	4.0088	0.0215	4.0303	1.0633	0.0198	1.0831						
<b>Total</b>	<b>1.6737</b>	<b>9.6870</b>	<b>14.2480</b>	<b>0.0737</b>	<b>5.3362</b>	<b>0.0729</b>	<b>5.4092</b>	<b>1.4455</b>	<b>0.0690</b>	<b>1.5145</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2023**

**Mitigated Construction On-Site**

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															
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

**Mitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2276	8.7556	3.1193	0.0402	1.3274	0.0514	1.3789	0.3822	0.0492	0.4314						
Worker	1.4461	0.9313	11.1287	0.0335	4.0088	0.0215	4.0303	1.0633	0.0198	1.0831						
<b>Total</b>	<b>1.6737</b>	<b>9.6870</b>	<b>14.2480</b>	<b>0.0737</b>	<b>5.3362</b>	<b>0.0729</b>	<b>5.4092</b>	<b>1.4455</b>	<b>0.0690</b>	<b>1.5145</b>						



Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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															
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>						

**Unmitigated Construction Off-Site**

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															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2185	8.6967	3.0481	0.0394	1.3275	0.0517	1.3791	0.3822	0.0494	0.4316						
Worker	1.3613	0.8374	10.4025	0.0324	4.0088	0.0205	4.0293	1.0633	0.0188	1.0822						
<b>Total</b>	<b>1.5798</b>	<b>9.5340</b>	<b>13.4506</b>	<b>0.0718</b>	<b>5.3363</b>	<b>0.0721</b>	<b>5.4084</b>	<b>1.4455</b>	<b>0.0683</b>	<b>1.5137</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2024**

**Mitigated Construction On-Site**

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
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>		<b>0.6133</b>	<b>0.6133</b>		<b>0.5769</b>	<b>0.5769</b>						

**Mitigated Construction Off-Site**

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
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.2185	8.6967	3.0481	0.0394	1.3275	0.0517	1.3791	0.3822	0.0494	0.4316						
Worker	1.3613	0.8374	10.4025	0.0324	4.0088	0.0205	4.0293	1.0633	0.0188	1.0822						
<b>Total</b>	<b>1.5798</b>	<b>9.5340</b>	<b>13.4506</b>	<b>0.0718</b>	<b>5.3363</b>	<b>0.0721</b>	<b>5.4084</b>	<b>1.4455</b>	<b>0.0683</b>	<b>1.5137</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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															
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.2371					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.2253</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

**Unmitigated Construction Off-Site**

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															
Hauling	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						
Worker	0.0418	0.0257	0.3198	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0418</b>	<b>0.0257</b>	<b>0.3198</b>	<b>1.0000e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.4 Paving - 2024**

**Mitigated Construction On-Site**

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															
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.2371					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.2253</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

**Mitigated Construction Off-Site**

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															
Hauling	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						
Worker	0.0418	0.0257	0.3198	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0418</b>	<b>0.0257</b>	<b>0.3198</b>	<b>1.0000e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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																
Archit. Coating	39.7205					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609						
<b>Total</b>	<b>39.9013</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>						

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.2734	0.1682	2.0890	6.5000e-003	0.8051	4.1100e-003	0.8092	0.2135	3.7800e-003	0.2173						
<b>Total</b>	<b>0.2734</b>	<b>0.1682</b>	<b>2.0890</b>	<b>6.5000e-003</b>	<b>0.8051</b>	<b>4.1100e-003</b>	<b>0.8092</b>	<b>0.2135</b>	<b>3.7800e-003</b>	<b>0.2173</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction On-Site**

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																
Archit. Coating	39.7205					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609						
<b>Total</b>	<b>39.9013</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>		<b>0.0609</b>	<b>0.0609</b>		<b>0.0609</b>	<b>0.0609</b>						

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.2734	0.1682	2.0890	6.5000e-003	0.8051	4.1100e-003	0.8092	0.2135	3.7800e-003	0.2173						
<b>Total</b>	<b>0.2734</b>	<b>0.1682</b>	<b>2.0890</b>	<b>6.5000e-003</b>	<b>0.8051</b>	<b>4.1100e-003</b>	<b>0.8092</b>	<b>0.2135</b>	<b>3.7800e-003</b>	<b>0.2173</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Category	lb/day															
	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	34.4964	33.2206	289.2648	0.5509	63.8465	0.4395	64.2861	17.0069	0.4097	17.4166						
Unmitigated	34.4964	33.2206	289.2648	0.5509	63.8465	0.4395	64.2861	17.0069	0.4097	17.4166						

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT		
Apartment Low Rise	282.00	282.00	282.00	805,196	805,196		
Enclosed Parking with Elevator	0.00	0.00	0.00				
General Office Building	3,114.48	3,114.48	3,114.48	7,442,825	7,442,825		
Hotel	960.00	960.00	960.00	1,823,934	1,823,934		
Movie Theater (No Matinee)	3,636.00	3,636.00	3,636.00	6,846,578	6,846,578		
Parking Lot	0.00	0.00	0.00				
Pharmacy/Drugstore w/o Drive Thru	1,350.00	1,350.00	1,350.00	1,584,613	1,584,613		
Regional Shopping Center	5,955.60	5,955.60	5,955.60	10,441,982	10,441,982		
Strip Mall	900.00	900.00	900.00	1,386,030	1,386,030		
<b>Total</b>	<b>16,198.08</b>	<b>16,198.08</b>	<b>16,198.08</b>	<b>30,331,157</b>	<b>30,331,157</b>		

**4.3 Trip Type Information**

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Pharmacy/Drugstore w/o Drive Thru	9.50	7.30	7.30	7.40	73.60	19.00	41	6	53
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
General Office Building	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Movie Theater (No Matinee)	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Parking Lot	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Pharmacy/Drugstore w/o Drive Thru	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Regional Shopping Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**



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

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
Natural Gas Mitigated	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
Natural Gas Unmitigated	0.4782	4.3387	3.5909	0.0261		0.3304	0.3304		0.3304	0.3304						
	lb/day										lb/day					

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

Land Use	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
	kBTU/yr					lb/day								lb/day			
Apartments Low Rise	1402.83	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
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						
General Office Building	13197.8	0.1423	1.2939	1.0869	7.7600e-003	0.0983	0.0983	0.0983	0.0983	0.0983	0.0983						
Hotel	27639.7	0.2981	2.7098	2.2762	0.0163	0.2059	0.2059	0.2059	0.2059	0.2059	0.2059						
Movie Theater (No Matinee)	1434.57	0.0155	0.1406	0.1181	8.4000e-004	0.0107	0.0107	0.0107	0.0107	0.0107	0.0107						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Pharmacy/Drugstore w/o Drive Thru	91.2329	9.8000e-004	8.9400e-003	7.5100e-003	5.0000e-005	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004						
Regional Shopping Center	517.473	5.5800e-003	0.0507	0.0426	3.0000e-004	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003						
Strip Mall	54.7397	5.9000e-004	5.3700e-003	4.5100e-003	3.0000e-005	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004						
<b>Total</b>		<b>0.4782</b>	<b>4.3387</b>	<b>3.5909</b>	<b>0.0261</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Winter

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	NaturalGas Use kBTU/yr	lb/day										lb/day					
		ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Apartments Low Rise	1.40283	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
General Office Building	13.1978	0.1423	1.2939	1.0869	7.7600e-003	0.0983	0.0983	0.0983	0.0983	0.0983							
Hotel	27.6397	0.2981	2.7098	2.2762	0.0163	0.2059	0.2059	0.2059	0.2059	0.2059							
Movie Theater (No Matinee)	1.43457	0.0155	0.1406	0.1181	8.4000e-004	0.0107	0.0107	0.0107	0.0107	0.0107							
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Pharmacy/Drugstore w/o Drive Thru	0.0912329	9.8000e-004	8.9400e-003	7.5100e-003	5.0000e-005	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004	6.8000e-004							
Regional Shopping Center	0.517473	5.5800e-003	0.0507	0.0426	3.0000e-004	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003	3.8600e-003							
Strip Mall	0.0547397	5.9000e-004	5.3700e-003	4.5100e-003	3.0000e-005	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004	4.1000e-004							
<b>Total</b>		<b>0.4782</b>	<b>4.3387</b>	<b>3.5909</b>	<b>0.0261</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>	<b>0.3304</b>							

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior

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

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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					
Mitigated	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Unmitigated	14.3830	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						

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

**6.2 Area by SubCategory**

Unmitigated

SubCategory	ROG	NOx	CO	SO2	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																
Architectural Coating	0.8488					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.3991					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						
Landscaping	0.1351	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>14.3830</b>	<b>0.0465</b>	<b>4.0779</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						
lb/day																

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.8488					0.0000	0.0000		0.0000	0.0000						
Consumer Products	13.3991					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						
Landscaping	0.1351	0.0465	4.0779	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>14.3830</b>	<b>0.0465</b>	<b>4.0779</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						
	lb/day															

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

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

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

**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**

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

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**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	240.50	1000sqft	0.70	240,500.00	0
Pharmacy/Drugstore w/o Drive Thru	15.00	1000sqft	0.34	15,000.00	0
Enclosed Parking with Elevator	1,100.00	Space	2.58	440,000.00	0
Parking Lot	388.00	Space	1.81	155,200.00	0
Hotel	120.00	Room	0.31	174,240.00	0
Movie Theater (No Matinee)	45.45	1000sqft	1.04	45,453.00	0
Apartments Low Rise	47.00	Dwelling Unit	1.78	47,000.00	134
Regional Shopping Center	85.08	1000sqft	1.95	85,080.00	0
Strip Mall	9.00	1000sqft	0.21	9,000.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2026		

Utility Company San Diego Gas & Electric

CO2 Intensity (lb/MW/hr)	539.98	CH4 Intensity (lb/MW/hr)	0.033	N2O Intensity (lb/MW/hr)	0.004
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per 2015 report

Construction Phase - Modeled same construction schedule as for Proposed Unit 10.

Trips and VMT -



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

Grading - Assume fine grading over entire 10.72 acres.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Vehicle Trips - Trip generation rates per size from 2015 report used.

Woodstoves - No hearths or woodstoves in Unit 10 apartments per 2015 report.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Water Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstructionPhase	NumDays	20.00	78.00
tblFireplaces	FireplacedayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00

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

tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tb\Grading	AcresOfGrading	90.00	10.72
tb\LandUse	LandUseSquareFeet	45,450.00	45,453.00
tb\LandUse	LotAcreage	5.52	0.70
tb\LandUse	LotAcreage	9.90	2.58
tb\LandUse	LotAcreage	3.49	1.81
tb\LandUse	LotAcreage	4.00	0.31
tb\LandUse	LotAcreage	2.94	1.78
tb\VehicleTrips	ST_TR	8.14	6.00
tb\VehicleTrips	ST_TR	2.21	12.95
tb\VehicleTrips	ST_TR	8.19	8.00
tb\VehicleTrips	ST_TR	99.32	80.00
tb\VehicleTrips	ST_TR	90.08	90.00
tb\VehicleTrips	ST_TR	46.12	70.00
tb\VehicleTrips	ST_TR	42.04	100.00
tb\VehicleTrips	SU_TR	6.28	6.00
tb\VehicleTrips	SU_TR	0.70	12.95
tb\VehicleTrips	SU_TR	5.95	8.00
tb\VehicleTrips	SU_TR	81.93	80.00
tb\VehicleTrips	SU_TR	90.08	90.00
tb\VehicleTrips	SU_TR	21.10	70.00
tb\VehicleTrips	SU_TR	20.43	100.00
tb\VehicleTrips	WD_TR	7.32	6.00
tb\VehicleTrips	WD_TR	9.74	12.95
tb\VehicleTrips	WD_TR	8.36	8.00
tb\VehicleTrips	WD_TR	78.09	80.00

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

tbVehicleTrips	WD_TR	90.08	90.00
tbVehicleTrips	WD_TR	37.75	70.00
tbVehicleTrips	WD_TR	44.32	100.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

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

**2.1 Overall Construction**

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
2023	0.3082	2.4983	2.9384	9.2700e-003	0.5287	0.0851	0.6138	0.1677	0.0797	0.2474						
2024	1.7765	1.6957	2.2964	7.2900e-003	0.3839	0.0535	0.4373	0.1040	0.0504	0.1544						
Maximum	1.7765	2.4983	2.9384	9.2700e-003	0.5287	0.0851	0.6138	0.1677	0.0797	0.2474						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
2023	0.3082	2.4983	2.9384	9.2700e-003	0.4701	0.0851	0.5552	0.1370	0.0797	0.2167						
2024	1.7765	1.6957	2.2964	7.2900e-003	0.3839	0.0535	0.4373	0.1040	0.0504	0.1544						
Maximum	1.7765	2.4983	2.9384	9.2700e-003	0.4701	0.0851	0.5552	0.1370	0.0797	0.2167						

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

	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	6.42	0.00	5.57	11.28	0.00	7.63	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)							Maximum Mitigated ROG + NOX (tons/quarter)						
1	4-3-2023	7-2-2023														
			1.0100								1.0100					
2	7-3-2023	10-2-2023														
			0.8795								0.8795					
3	10-3-2023	1-2-2024														
			0.8967								0.8967					
4	1-3-2024	4-2-2024														
			0.8456								0.8456					
5	4-3-2024	7-2-2024														
			0.8282								0.8282					
6	7-3-2024	9-30-2024														
			0.9729								0.9729					
			Highest								1.0100					

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

**2.2 Overall Operational**

**Unmitigated Operational**

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
tons/yr																
Area	2.6124	4.1800e-003	0.3670	2.0000e-005	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003						
Energy	0.0873	0.7918	0.6553	4.7600e-003	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603						
Mobile	6.1578	5.9663	51.3408	0.1008	11.3454	0.0799	11.4253	3.0278	0.0745	3.1023						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>8.8574</b>	<b>6.7623</b>	<b>52.3632</b>	<b>0.1056</b>	<b>11.3454</b>	<b>0.1422</b>	<b>11.4876</b>	<b>3.0278</b>	<b>0.1367</b>	<b>3.1646</b>						
MT/yr																

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

**2.2 Overall Operational**

**Mitigated Operational**

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
	tons/yr															
Area	2.6124	4.1800e-003	0.3670	2.0000e-005	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003						
Energy	0.0873	0.7918	0.6553	4.7600e-003	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603						
Mobile	6.1578	5.9663	51.3408	0.1008	11.3454	0.0799	11.4253	3.0278	0.0745	3.1023						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>8.8574</b>	<b>6.7623</b>	<b>52.3632</b>	<b>0.1056</b>	<b>11.3454</b>	<b>0.1422</b>	<b>11.4876</b>	<b>3.0278</b>	<b>0.1367</b>	<b>3.1646</b>						
	MT/yr															

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

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30	
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300	
3	Paving	Paving	7/8/2024	8/2/2024	5	20	

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

4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78
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**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10.72**

**Acres of Paving: 4.39**

**Residential Indoor: 95,175; Residential Outdoor: 31,725; Non-Residential Indoor: 853,910; Non-Residential Outdoor: 284,637; Striped Parking Area: 35,712 (Architectural Coating – sqft)**

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT



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Building Construction	9	488.00	196.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	98.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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
	tons/yr										MT/yr					
Fugitive Dust					0.0960	0.0000	0.0960	0.0503	0.0000	0.0503						
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197						
<b>Total</b>	<b>0.0498</b>	<b>0.5177</b>	<b>0.4208</b>	<b>9.3000e-004</b>	<b>0.0960</b>	<b>0.0214</b>	<b>0.1174</b>	<b>0.0503</b>	<b>0.0197</b>	<b>0.0699</b>						

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

**3.2 Grading - 2023**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	8.1000e-004	5.6000e-004	6.8400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004						
<b>Total</b>	<b>8.1000e-004</b>	<b>5.6000e-004</b>	<b>6.8400e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>1.0000e-005</b>	<b>2.4200e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Fugitive Dust					0.0375	0.0000	0.0375	0.0196	0.0000	0.0196						
Off-Road	0.0498	0.5177	0.4208	9.3000e-004		0.0214	0.0214		0.0197	0.0197						
<b>Total</b>	<b>0.0498</b>	<b>0.5177</b>	<b>0.4208</b>	<b>9.3000e-004</b>	<b>0.0375</b>	<b>0.0214</b>	<b>0.0588</b>	<b>0.0196</b>	<b>0.0197</b>	<b>0.0393</b>						

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

**3.2 Grading - 2023**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	8.1000e-004	5.6000e-004	6.8400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004						
<b>Total</b>	<b>8.1000e-004</b>	<b>5.6000e-004</b>	<b>6.8400e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>1.0000e-005</b>	<b>2.4200e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>						

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	0.1298	1.1868	1.3401	2.2200e-003	0.0577	0.0577	0.0577	0.0543	0.0543	0.0543						
<b>Total</b>	<b>0.1298</b>	<b>1.1868</b>	<b>1.3401</b>	<b>2.2200e-003</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0543</b>	<b>0.0543</b>	<b>0.0543</b>						

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

**3.3 Building Construction - 2023**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0190	0.7179	0.2532	3.3100e-003	0.1074	4.2300e-003	0.1116	0.0310	4.0500e-003	0.0351						
Worker	0.1089	0.0753	0.9175	2.7900e-003	0.3229	1.7700e-003	0.3246	0.0858	1.6300e-003	0.0874						
<b>Total</b>	<b>0.1278</b>	<b>0.7932</b>	<b>1.1707</b>	<b>6.1000e-003</b>	<b>0.4302</b>	<b>6.0000e-003</b>	<b>0.4362</b>	<b>0.1168</b>	<b>5.6800e-003</b>	<b>0.1225</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	0.1298	1.1868	1.3401	2.2200e-003	0.0577	0.0577	0.0577	0.0543	0.0543	0.0543						
<b>Total</b>	<b>0.1298</b>	<b>1.1868</b>	<b>1.3401</b>	<b>2.2200e-003</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0543</b>	<b>0.0543</b>	<b>0.0543</b>						

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

**3.3 Building Construction - 2023**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0190	0.7179	0.2532	3.3100e-003	0.1074	4.2300e-003	0.1116	0.0310	4.0500e-003	0.0351						
Worker	0.1089	0.0753	0.9175	2.7900e-003	0.3229	1.7700e-003	0.3246	0.0858	1.6300e-003	0.0874						
<b>Total</b>	<b>0.1278</b>	<b>0.7932</b>	<b>1.1707</b>	<b>6.1000e-003</b>	<b>0.4302</b>	<b>6.0000e-003</b>	<b>0.4362</b>	<b>0.1168</b>	<b>5.6800e-003</b>	<b>0.1225</b>						

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	0.0993	0.9075	1.0913	1.8200e-003	0.0414	0.0414	0.0414	0.0389	0.0389	0.0389						
<b>Total</b>	<b>0.0993</b>	<b>0.9075</b>	<b>1.0913</b>	<b>1.8200e-003</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0389</b>	<b>0.0389</b>	<b>0.0389</b>						

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

**3.3 Building Construction - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0149	0.5834	0.2024	2.6500e-003	0.0879	3.4800e-003	0.0913	0.0254	3.3300e-003	0.0287						
Worker	0.0837	0.0554	0.7013	2.2000e-003	0.2642	1.3800e-003	0.2655	0.0702	1.2700e-003	0.0715						
<b>Total</b>	<b>0.0986</b>	<b>0.6388</b>	<b>0.9037</b>	<b>4.8500e-003</b>	<b>0.3520</b>	<b>4.8600e-003</b>	<b>0.3569</b>	<b>0.0956</b>	<b>4.6000e-003</b>	<b>0.1002</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	0.0993	0.9075	1.0913	1.8200e-003		0.0414	0.0414		0.0389	0.0389						
<b>Total</b>	<b>0.0993</b>	<b>0.9075</b>	<b>1.0913</b>	<b>1.8200e-003</b>		<b>0.0414</b>	<b>0.0414</b>		<b>0.0389</b>	<b>0.0389</b>						

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

**3.3 Building Construction - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0149	0.5834	0.2024	2.6600e-003	0.0879	3.4800e-003	0.0913	0.0254	3.3300e-003	0.0287						
Worker	0.0837	0.0554	0.7013	2.2000e-003	0.2642	1.3800e-003	0.2655	0.0702	1.2700e-003	0.0715						
<b>Total</b>	<b>0.0986</b>	<b>0.6388</b>	<b>0.9037</b>	<b>4.8600e-003</b>	<b>0.3520</b>	<b>4.8600e-003</b>	<b>0.3569</b>	<b>0.0956</b>	<b>4.6000e-003</b>	<b>0.1002</b>						

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004	4.6900e-003	4.6900e-003	4.6900e-003	4.3100e-003	4.3100e-003	4.3100e-003						
Paving	2.3700e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>	<b>0.0123</b>	<b>0.0953</b>	<b>0.1463</b>	<b>2.3000e-004</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>						

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

**3.4 Paving - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	3.8000e-004	2.5000e-004	3.1900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004						
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004	4.6900e-003	4.6900e-003	4.6900e-003	4.3100e-003	4.3100e-003	4.3100e-003						
Paving	2.3700e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>	<b>0.0123</b>	<b>0.0953</b>	<b>0.1463</b>	<b>2.3000e-004</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>						



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

**3.4 Paving - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	3.8000e-004	2.5000e-004	3.1900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004						
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>						

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Archit. Coating	1.5491					0.0000	0.0000		0.0000	0.0000						
Off-Road	7.0500e-003	0.0475	0.0706	1.2000e-004	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003						
<b>Total</b>	<b>1.5562</b>	<b>0.0475</b>	<b>0.0706</b>	<b>1.2000e-004</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>						
MT/yr																

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	9.7100e-003	6.4300e-003	0.0814	2.6000e-004	0.0307	1.6000e-004	0.0308	8.1400e-003	1.5000e-004	8.2900e-003						
<b>Total</b>	<b>9.7100e-003</b>	<b>6.4300e-003</b>	<b>0.0814</b>	<b>2.6000e-004</b>	<b>0.0307</b>	<b>1.6000e-004</b>	<b>0.0308</b>	<b>8.1400e-003</b>	<b>1.5000e-004</b>	<b>8.2900e-003</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Archit. Coating	1.5491				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	7.0500e-003	0.0475	0.0706	1.2000e-004	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003						
<b>Total</b>	<b>1.5562</b>	<b>0.0475</b>	<b>0.0706</b>	<b>1.2000e-004</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>						
MT/yr																

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	9.7100e-003	6.4300e-003	0.0814	2.6000e-004	0.0307	1.6000e-004	0.0308	8.1400e-003	1.5000e-004	8.2900e-003						
<b>Total</b>	<b>9.7100e-003</b>	<b>6.4300e-003</b>	<b>0.0814</b>	<b>2.6000e-004</b>	<b>0.0307</b>	<b>1.6000e-004</b>	<b>0.0308</b>	<b>8.1400e-003</b>	<b>1.5000e-004</b>	<b>8.2900e-003</b>						
MT/yr																

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

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

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
Mitigated	6.1578	5.9663	51.3408	0.1008	11.3454	0.0799	11.4253	3.0278	0.0745	3.1023						
Unmitigated	6.1578	5.9663	51.3408	0.1008	11.3454	0.0799	11.4253	3.0278	0.0745	3.1023						
tons/yr																
MT/yr																

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartment Low Rise	282.00	282.00	282.00	805,196	805,196
Enclosed Parking with Elevator	0.00	0.00	0.00		
General Office Building	3,114.48	3,114.48	3,114.48	7,442,825	7,442,825
Hotel	960.00	960.00	960.00	1,823,934	1,823,934
Movie Theater (No Matinee)	3,636.00	3,636.00	3,636.00	6,846,578	6,846,578
Parking Lot	0.00	0.00	0.00		
Pharmacy/Drugstore w/o Drive Thru	1,350.00	1,350.00	1,350.00	1,584,613	1,584,613
Regional Shopping Center	5,955.60	5,955.60	5,955.60	10,441,982	10,441,982
Strip Mall	900.00	900.00	900.00	1,386,030	1,386,030
Total	16,198.08	16,198.08	16,198.08	30,331,157	30,331,157

**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
Apartment Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Movie Theater (No Matinee)	9.50	7.30	7.30	1.80	79.20	19.00	66	17	17
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Pharmacy/Drugstore w/o Drive	9.50	7.30	7.30	7.40	73.60	19.00	41	6	53
Regional Shopping Center	9.50	7.30	7.30	16.30	64.70	19.00	54	35	11
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
General Office Building	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Movie Theater (No Matinee)	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Parking Lot	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Pharmacy/Drugstore w/o Drive	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Regional Shopping Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

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

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
tons/yr																
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	0.0873	0.7918	0.6553	4.7600e-003	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603						
NaturalGas Unmitigated	0.0873	0.7918	0.6553	4.7600e-003	0.0603	0.0603	0.0603	0.0603	0.0603	0.0603						
MT/yr																

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

**5.2 Energy by Land Use - NaturalGas**

Unmitigated

Land Use	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
	KBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	512034	2.7600e-003	0.0236	0.0100	1.5000e-004	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003						
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						
General Office Building	4,817,226+006	0.0260	0.2361	0.1984	1.4200e-003	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180						
Hotel	1,008,856+007	0.0544	0.4945	0.4154	2.9700e-003	0.0376	0.0376	0.0376	0.0376	0.0376	0.0376						
Movie Theater (No Matinee)	523619	2.8200e-003	0.0257	0.0216	1.5000e-004	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003						
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Pharmacy/Drugstore w/o Drive Thru	33300	1.8000e-004	1.6300e-003	1.3700e-003	1.0000e-005	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004						
Regional Shopping Center	188878	1.0200e-003	9.2600e-003	7.7800e-003	6.0000e-005	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004						
Strip Mall	19980	1.1000e-004	9.8000e-004	8.2000e-004	1.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005						
<b>Total</b>		<b>0.0873</b>	<b>0.7918</b>	<b>0.6553</b>	<b>4.7700e-003</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>						

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	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	
	kBTU/yr																	MT/yr
Apartment's Low Rise	512034	2.7600e-003	0.0236	0.0100	1.5000e-004	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003							
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							
General Office Building	4,817,226+006	0.0260	0.2361	0.1984	1.4200e-003	0.0180	0.0180	0.0180	0.0180	0.0180	0.0180							
Hotel	1,008,856+007	0.0544	0.4945	0.4154	2.9700e-003	0.0376	0.0376	0.0376	0.0376	0.0376	0.0376							
Movie Theater (No Matinee)	523619	2.8200e-003	0.0257	0.0216	1.5000e-004	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003	1.9500e-003							
Parking Lot	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Pharmacy/Drugstore w/o Drive Thru	33300	1.8000e-004	1.6300e-003	1.3700e-003	1.0000e-005	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004	1.2000e-004							
Regional Shopping Center	188878	1.0200e-003	9.2600e-003	7.7800e-003	6.0000e-005	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004	7.0000e-004							
Strip Mall	19980	1.1000e-004	9.8000e-004	8.2000e-004	1.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005	7.0000e-005							
<b>Total</b>		<b>0.0873</b>	<b>0.7918</b>	<b>0.6553</b>	<b>4.7700e-003</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>	<b>0.0603</b>							



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

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

Land Use	Electricity Use KWh/yr	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Low Rise	189818				
Enclosed Parking with Elevator	2.3936e+006				
General Office Building	3.11207e+006				
Hotel	2.16755e+006				
Movie Theater (No Matinee)	371806				
Parking Lot	54320				
Pharmacy/Drugstore w/o Drive Thru	183300				
Regional Shopping Center	1.03968e+006				
Strip Mall	109980				
<b>Total</b>					

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

**5.3 Energy by Land Use - Electricity**

**Mitigated**

Land Use	Electricity Use KWh/yr	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Low Rise	189818				
Enclosed Parking with Elevator	2.3936e+006				
General Office Building	3.11207e+006				
Hotel	2.16755e+006				
Movie Theater (No Matinee)	371806				
Parking Lot	54320				
Pharmacy/Drugstore w/o Drive Thru	183300				
Regional Shopping Center	1.03968e+006				
Strip Mall	109980				
<b>Total</b>					

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

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

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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
	tons/yr										MT/yr					
Mitigated	2.6124	4.1800e-003	0.3670	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
Unmitigated	2.6124	4.1800e-003	0.3670	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Annual

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

**6.2 Area by SubCategory**

Unmitigated

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr											MT/yr					
Architectural Coating	0.1549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.4453					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						
Landscaping	0.0122	4.1800e-003	0.3670	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
<b>Total</b>	<b>2.6124</b>	<b>4.1800e-003</b>	<b>0.3670</b>	<b>2.0000e-005</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>						

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	tons/yr										MT/yr					
Architectural Coating	0.1549					0.0000	0.0000		0.0000	0.0000						
Consumer Products	2.4453					0.0000	0.0000		0.0000	0.0000						
Heathn	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Landscaping	0.0122	4.1800e-003	0.3670	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
<b>Total</b>	<b>2.6124</b>	<b>4.1800e-003</b>	<b>0.3670</b>	<b>2.0000e-005</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>						

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

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

Category	Total CO2	CH4	N2O	CO2e
Mitigated	MT/yr			
Unmitigated				

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

**7.2 Water by Land Use**

**Unmitigated**

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Apartments Low Rise	3.06224 / 1.93054				
Enclosed Parking with Elevator	0 / 0				
General Office Building	42.745 / 26.1985				
Hotel	3.04401 / 0.338224				
Movie Theater (No Matinee)	18.2528 / 1.16507				
Parking Lot	0 / 0				
Pharmacy/Drugstore w/o Drive Thru	1.05671 / 0.647663				
Regional Shopping Center	6.30209 / 3.86257				
Strip Mall	0.66653 / 0.408594				
<b>Total</b>					

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

**7.2 Water by Land Use**

**Mitigated**

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Apartments Low Rise	2,44979 / 1,81278				
Enclosed Parking with Elevator	0 / 0				
General Office Building	34,196 / 24,6004				
Hotel	2,43521 / 0,317592				
Movie Theater (No Matinee)	14,6022 / 1,094				
Parking Lot	0 / 0				
Pharmacy/Drugstore w/o Drive Thru	0,84537 / 0,608155				
Regional Shopping Center	5,04167 / 3,62695				
Strip Mall	0,533322 / 0,383669				
<b>Total</b>					

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services



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

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MTYr			
Mitigated				
Unmitigated				

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

**8.2 Waste by Land Use**

**Unmitigated**

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
Apartment's Low Rise	21.62				
Enclosed Parking with Elevator	0				
General Office Building	223.67				
Hotel	65.7				
Movie Theater (No Matinee)	259.06				
Parking Lot	0				
Pharmacy/Drugstore w/o Drive Thru	45.1				
Regional Shopping Center	89.33				
Strip Mall	9.45				
<b>Total</b>					

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

**8.2 Waste by Land Use**

**Mitigated**

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
Apartment's Low Rise	7.567				
Enclosed Parking with Elevator	0				
General Office Building	78,2845				
Hotel	22,995				
Movie Theater (No Matinee)	90,671				
Parking Lot	0				
Pharmacy/Drugstore w/o Drive Thru	15,785				
Regional Shopping Center	31,2655				
Strip Mall	3,3075				
<b>Total</b>					

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

Merge 56 Unit 10 (Previously Approved) - San Diego County APCD Air District, Annual

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

**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
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**User Defined Equipment**

Equipment Type	Number
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**11.0 Vegetation**

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Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**Merge 56, Proposed Unit 10**

San Diego County APCD Air District, Summer

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	610.00	1000sqft	2.71	610,000.00	0
Day-Care Center	8.00	1000sqft	0.18	8,000.00	0
Enclosed Parking with Elevator	617.10	1000sqft	0.93	617,103.00	0
Other Asphalt Surfaces	230.70	1000sqft	5.30	230,696.00	0
Unenclosed Parking with Elevator	309.69	1000sqft	0.00	309,690.00	0
Hotel	120.00	Room	0.85	131,031.00	0
Quality Restaurant	15.00	1000sqft	0.34	15,000.00	0
Apartments Low Rise	47.00	Dwelling Unit	0.36	61,537.00	134
Strip Mall	21.45	1000sqft	0.04	21,448.00	0
Strip Mall	5.55	1000sqft	0.01	5,552.00	0

**1.2 Other Project Characteristics**

Urbanization Urban Wind Speed (m/s) 2.6 Precipitation Freq (Days) 40  
 Climate Zone 13 Operational Year 2026

Utility Company San Diego Gas & Electric

CO2 Intensity 539.98 CH4 Intensity 0.033 N2O Intensity 0.004  
 (lb/MW/hr) (lb/MW/hr) (lb/MW/hr)

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

Project Characteristics -

Land Use - Per client info. 5550 sqft strip mall Land Use used for shopkeeper space.

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Construction Phase - Site has already been cleared and grubbed, and rough grading has already occurred. Including Grading to ensure fine grading activity is covered.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Site has already been graded; grading and export not anticipated to be different from previous Approved Unit 10 uses. However, conservatively including acreage to ensure fine grading activity is covered.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces < 20% painted. Default non-residential area 395,516 sqft.

Vehicle Trips - Traffic from Trip Generation table in October 4, 2022 memo by Urban Systems Associates, Inc. Trip reductions have not been taken, as mixed use reduction is not applicable to projects proposing less than 100,000 sf commercial retail.

Woodstoves - No hearths.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces <20% painted.

Energy Use - HHW specifications for R&D buildings provided by client, placed under stationary sources. Title 24 NG removed to avoid double counting gas use.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction to be conservative.

Stationary Sources - Process Boilers -

Stationary Sources - User Defined - Title 24 heating placed here to show compliance with SDAPCD Rule 69.2.1: NOx limit of 20 ppmv from new equipment >400,000 to 2million BTU/hr. Other EFs per SDAPCD Calculation B16 NG Boiler 0.3-100-MMBTU, No controls.

Stationary Sources - Emergency Generators and Fire Pumps EF - Emergency Generator specs provided by client. Tier 2 EFs used for CO, NMHC+NOx (of which ROG=5%, NOx=95%), and PM. PM=PM10=PM2.5. TOG/ROG ratio from ARB. SDAPCD EFs for SO2.

Table Name	Column Name	Default Value	New Value
tb\ArchitecturalCoating	ConstArea_Nonresidential_Exterior	395,516.00	79,013.20
tb\ArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tb\ArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tb\ArchitecturalCoating	EF_Parking	250.00	100.00

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

tb\ArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tb\ArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tb\AreaCoating	Area_EF_Nonresidential_Exterior	250	50
tb\AreaCoating	Area_EF_Nonresidential_Interior	250	50
tb\AreaCoating	Area_EF_Parking	250	100
tb\AreaCoating	Area_EF_Residential_Exterior	250	50
tb\AreaCoating	Area_EF_Residential_Interior	250	50
tb\AreaCoating	Area_Nonresidential_Exterior	395516	79103
tb\AreaMitigation	UseLowVOCPaintParkingCheck	False	True
tb\ConstrDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb\ConstructionPhase	NumDays	20.00	78.00
tb\ConstructionPhase	PhaseEndDate	8/30/2024	11/20/2024
tb\ConstructionPhase	PhaseStartDate	8/3/2024	8/5/2024
tb\ConstructionPhase	PhaseStartDate	5/13/2023	5/15/2023
tb\ConstructionPhase	PhaseStartDate	7/6/2024	7/8/2024
tb\EnergyUse	T24NG	4.27	0.00
tb\Fireplaces	FireplaceDayYear	82.00	0.00
tb\Fireplaces	FireplaceHourDay	3.00	0.00
tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tb\Grading	AcresOfGrading	90.00	10.72
tb\LandUse	LandUseSquareFoot	617,100.00	617,103.00
tb\LandUse	LandUseSquareFoot	230,700.00	230,696.00
tb\LandUse	LandUseSquareFoot	174,240.00	131,031.00
tb\LandUse	LandUseSquareFoot	47,000.00	61,537.00
tb\LandUse	LandUseSquareFoot	21,450.00	21,448.00
tb\LandUse	LandUseSquareFoot	5,550.00	5,552.00

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

tblLandUse	LotAcreage	14.00	2.71
tblLandUse	LotAcreage	14.17	0.93
tblLandUse	LotAcreage	7.11	0.00
tblLandUse	LotAcreage	4.00	0.85
tblLandUse	LotAcreage	2.94	0.36
tblLandUse	LotAcreage	0.49	0.04
tblLandUse	LotAcreage	0.13	0.01
tblStationaryGeneratorsPumpSEF	ROG_EF	2.2480e-003	5.3000e-004
tblStationaryGeneratorsPumpSEF	TOG_EF	2.4700e-003	6.3000e-004
tblStationaryGeneratorsPumpUse	HorsePowerValue	0.00	2.923.00
tblStationaryGeneratorsPumpUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	6.22	80.00
tblVehicleTrips	ST_TR	8.19	8.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	ST_TR	1.90	8.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	5.84	80.00
tblVehicleTrips	SU_TR	5.95	8.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	SU_TR	1.11	8.00
tblVehicleTrips	SU_TR	20.43	40.00
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	47.62	80.00
tblVehicleTrips	WD_TR	8.36	8.00
tblVehicleTrips	WD_TR	83.84	100.00



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

tbVehicleTrips	WD_TR	11.26	8.00
tbVehicleTrips	WD_TR	44.32	40.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

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

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2023	4.1160	34.5495	40.1844	0.1506	8.6758	1.4254	9.4949	3.3947	1.3113	4.7061						
2024	47.2513	28.4421	38.7199	0.1474	8.6758	0.7314	9.4072	2.3509	0.6887	3.0396						
<b>Maximum</b>	<b>47.2513</b>	<b>34.5495</b>	<b>40.1844</b>	<b>0.1506</b>	<b>8.6758</b>	<b>1.4254</b>	<b>9.4949</b>	<b>3.3947</b>	<b>1.3113</b>	<b>4.7061</b>						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
2023	4.1160	34.5495	40.1844	0.1506	8.6758	1.4254	9.4949	2.3509	1.3113	3.1223						
2024	47.2513	28.4421	38.7199	0.1474	8.6758	0.7314	9.4072	2.3509	0.6887	3.0396						
<b>Maximum</b>	<b>47.2513</b>	<b>34.5495</b>	<b>40.1844</b>	<b>0.1506</b>	<b>8.6758</b>	<b>1.4254</b>	<b>9.4949</b>	<b>2.3509</b>	<b>1.3113</b>	<b>3.1223</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.17	0.00	20.45	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

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															
Area	19,7867	0,0464	4,0712	2,2000e-004		0,0222	0,0222		0,0222	0,0222						
Energy	0,4502	4,0848	3,3776	0,0246		0,3111	0,3111		0,3111	0,3111						
Mobile	21,3737	18,8006	170,0026	0,3605	40,1121	0,2730	40,3850	10,6847	0,2545	10,9392						
Stationary	8,8281	89,2047	119,7046	0,6621		9,6275	9,6275		9,6275	9,6275						
<b>Total</b>	<b>50,4387</b>	<b>112,1365</b>	<b>297,1560</b>	<b>1,0473</b>	<b>40,1121</b>	<b>10,2337</b>	<b>50,3458</b>	<b>10,6847</b>	<b>10,2152</b>	<b>20,8999</b>						
	lb/day															

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**2.2 Overall Operational**

**Mitigated Operational**

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															
Area	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
Mobile	18.8878	14.9024	133.2806	0.2631	28.9083	0.2061	29.1145	7.7003	0.1921	7.8924						
Stationary	8.8281	89.2047	119.7046	0.6621		9.6275	9.6275		9.6275	9.6275						
<b>Total</b>	<b>47.9528</b>	<b>108.2382</b>	<b>260.4340</b>	<b>0.9499</b>	<b>28.9083</b>	<b>10.1669</b>	<b>39.0752</b>	<b>7.7003</b>	<b>10.1528</b>	<b>17.8532</b>						

Percent Reduction	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	4.93	3.48	12.36	9.30	27.93	0.65	22.39	27.93	0.61	14.58	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30	
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300	
3	Paving	Paving	7/8/2024	8/2/2024	5	20	
4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78	

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.72

Acres of Paving: 6.23

Residential Indoor: 124,612; Residential Outdoor: 41,537; Non-Residential Indoor: 1,186,547; Non-Residential Outdoor: 79,013; Striped Parking Area: 69,449 (Architectural Coating – sqft)

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	789.00	324.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	158.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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															
Fugitive Dust					6.4010	0.0000	6.4010	3.3512	0.0000	3.3512						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>6.4010</b>	<b>1.4245</b>	<b>7.8255</b>	<b>3.3512</b>	<b>1.3105</b>	<b>4.6617</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.2 Grading - 2023**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0547	0.0339	0.4800	1.4500e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0547</b>	<b>0.0339</b>	<b>0.4800</b>	<b>1.4500e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

**Mitigated Construction On-Site**

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																
Fugitive Dust					2.4964	0.0000	2.4964	1.3070	0.0000	1.3070						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>2.4964</b>	<b>1.4245</b>	<b>3.9209</b>	<b>1.3070</b>	<b>1.3105</b>	<b>2.6175</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.2 Grading - 2023**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0547	0.0339	0.4800	1.4500e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0547</b>	<b>0.0339</b>	<b>0.4800</b>	<b>1.4500e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2023**

**Unmitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3870	13.8892	5.0052	0.0663	2.1943	0.0846	2.2790	0.6317	0.0809	0.7127						
Worker	2.1562	1.3390	18.9352	0.0573	6.4815	0.0348	6.5162	1.7192	0.0320	1.7512						
<b>Total</b>	<b>2.5432</b>	<b>15.2281</b>	<b>23.9404</b>	<b>0.1236</b>	<b>8.6758</b>	<b>0.1194</b>	<b>8.7952</b>	<b>2.3509</b>	<b>0.1129</b>	<b>2.4638</b>						

**Mitigated Construction On-Site**

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																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2023**

**Mitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3870	13.8892	5.0052	0.0663	2.1943	0.0846	2.2790	0.6317	0.0809	0.7127						
Worker	2.1562	1.3390	18.9352	0.0573	6.4815	0.0348	6.5162	1.7192	0.0320	1.7512						
<b>Total</b>	<b>2.5432</b>	<b>15.2281</b>	<b>23.9404</b>	<b>0.1236</b>	<b>8.6758</b>	<b>0.1194</b>	<b>8.7952</b>	<b>2.3509</b>	<b>0.1129</b>	<b>2.4638</b>						

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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																
Off-Road	1.4716	13.4438	16.1668	0.0270	0.6133	0.6133	0.6133	0.5769	0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.5769</b>	<b>0.5769</b>	<b>0.5769</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3727	13.7944	4.8882	0.0651	2.1944	0.0850	2.2794	0.6317	0.0813	0.7131						
Worker	2.0246	1.2039	17.6649	0.0554	6.4815	0.0331	6.5145	1.7192	0.0305	1.7496						
<b>Total</b>	<b>2.3973</b>	<b>14.9983</b>	<b>22.5531</b>	<b>0.1205</b>	<b>8.6758</b>	<b>0.1181</b>	<b>8.7939</b>	<b>2.3509</b>	<b>0.1118</b>	<b>2.4627</b>						

**Mitigated Construction On-Site**

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																
Off-Road	1.4716	13.4438	16.1668	0.0270	0.6133	0.6133	0.6133	0.5769	0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.5769</b>	<b>0.5769</b>	<b>0.5769</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.3 Building Construction - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3727	13.7944	4.8882	0.0651	2.1944	0.0850	2.2794	0.6317	0.0813	0.7131						
Worker	2.0246	1.2039	17.6649	0.0554	6.4815	0.0331	6.5145	1.7192	0.0305	1.7496						
<b>Total</b>	<b>2.3973</b>	<b>14.9983</b>	<b>22.5531</b>	<b>0.1205</b>	<b>8.6758</b>	<b>0.1181</b>	<b>8.7939</b>	<b>2.3509</b>	<b>0.1118</b>	<b>2.4627</b>						

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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																
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.6943					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.6825</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.4 Paving - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0385	0.0229	0.3358	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0385</b>	<b>0.0229</b>	<b>0.3358</b>	<b>1.0500e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

**Mitigated Construction On-Site**

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																
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.6943					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.6825</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.4 Paving - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0385	0.0229	0.3358	1.0500e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0385</b>	<b>0.0229</b>	<b>0.3358</b>	<b>1.0500e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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																
Archit. Coating	46.6652					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609	0.0609	0.0609	0.0609						
<b>Total</b>	<b>46.8459</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.4054	0.2411	3.5375	0.0111	1.2979	6.6200e-003	1.3046	0.3443	6.1000e-003	0.3504						
<b>Total</b>	<b>0.4054</b>	<b>0.2411</b>	<b>3.5375</b>	<b>0.0111</b>	<b>1.2979</b>	<b>6.6200e-003</b>	<b>1.3046</b>	<b>0.3443</b>	<b>6.1000e-003</b>	<b>0.3504</b>						

**Mitigated Construction On-Site**

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																
Archit. Coating	46.6652					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609	0.0609	0.0609	0.0609						
<b>Total</b>	<b>46.8459</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.4054	0.2411	3.5375	0.0111	1.2979	6.6200e-003	1.3046	0.3443	6.1000e-003	0.3504						
<b>Total</b>	<b>0.4054</b>	<b>0.2411</b>	<b>3.5375</b>	<b>0.0111</b>	<b>1.2979</b>	<b>6.6200e-003</b>	<b>1.3046</b>	<b>0.3443</b>	<b>6.1000e-003</b>	<b>0.3504</b>						
lb/day																

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Increase Density
- Increase Diversity
- Improve Walkability Design
- Integrate Below Market Rate Housing
- Improve Pedestrian Network



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Category	lb/day											lb/day				
	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	18,8878	14,9024	133,2806	0,2631	28,9083	0,2061	29,1145	7,7003	0,1921	7,8924						
Unmitigated	21,3737	18,8006	170,0026	0,3605	40,1121	0,2730	40,3850	10,6847	0,2545	10,9392						

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Low Rise	282.00	282.00	282.00	805,196	580,295
Day-Care Center	640.00	640.00	640.00	753,683	543,170
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	960.00	960.00	960.00	1,823,934	1,314,488
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	1,500.00	1,500.00	1,500.00	1,779,250	1,282,285
Research & Development	4,880.00	4,880.00	4,880.00	12,230,487	8,814,370
Strip Mall	858.00	858.00	858.00	1,321,348	952,280
Strip Mall	222.00	222.00	222.00	341,887	246,394
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>19,055,785</b>	<b>13,733,283</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Land Use	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	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	9.50	7.30	7.30	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
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Day-Care Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Other Asphalt Surfaces	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Quality Restaurant	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Research & Development	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Unenclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

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
Natural Gas Mitigated	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
Natural Gas Unmitigated	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
	lb/day															

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

Land Use	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
	kBTU/yr	lb/day															
Apartments Low Rise	1402.83	0.0151	0.1293	0.0550	8.3000e-004		0.0105	0.0105		0.0105	0.0105						
Day-Care Center	128.438	1.3900e-003	0.0126	0.0106	8.0000e-005		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004						
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Hotel	20785.5	0.2242	2.0378	1.7117	0.0122		0.1549	0.1549		0.1549	0.1549						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
Quality Restaurant	7151.51	0.0771	0.7011	0.5890	4.2100e-003		0.0533	0.0533		0.0533	0.0533						
Research & Development	12116.4	0.1307	1.1879	0.9978	7.1300e-003		0.0903	0.0903		0.0903	0.0903						
Strip Mall	130.451	1.4100e-003	0.0128	0.0107	8.0000e-005		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004						
Strip Mall	33.7683	3.6000e-004	3.3100e-003	2.7800e-003	2.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004						
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000						
<b>Total</b>		<b>0.4502</b>	<b>4.0848</b>	<b>3.3776</b>	<b>0.0246</b>		<b>0.3111</b>	<b>0.3111</b>		<b>0.3111</b>	<b>0.3111</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	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
	kBTU/yr	lb/day															
Apartments Low Rise	1.40283	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
Day-Care Center	0.128438	1.3900e-003	0.0126	0.0106	8.0000e-005	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004						
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						
Hotel	20.7855	0.2242	2.0378	1.7117	0.0122	0.1549	0.1549	0.1549	0.1549	0.1549	0.1549						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Quality Restaurant	7.15151	0.0771	0.7011	0.5890	4.2100e-003	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533						
Research & Development	12.1164	0.1307	1.1879	0.9978	7.1300e-003	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903						
Shpp Mall	0.0337683	3.6000e-004	3.3100e-003	2.7800e-003	2.0000e-005	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004						
Shpp Mall	0.130451	1.4100e-003	0.0128	0.0107	8.0000e-005	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004						
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>		<b>0.4502</b>	<b>4.0848</b>	<b>3.3776</b>	<b>0.0246</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>						

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

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					
Mitigated	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Unmitigated	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**6.2 Area by SubCategory**

**Unmitigated**

SubCategory	ROG	NOx	CO	SO2	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																
Architectural Coating	0.9973					0.0000	0.0000		0.0000	0.0000						
Consumer Products	18.6549					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						
Landscaping	0.1345	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>19.7867</b>	<b>0.0464</b>	<b>4.0712</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						
lb/day																

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.9973					0.0000	0.0000		0.0000	0.0000						
Consumer Products	18.6549					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						
Landscaping	0.1345	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>19.7867</b>	<b>0.0464</b>	<b>4.0712</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						
	lb/day															

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	1	50	2923		0.73 Diesel

**Boilers**

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

Equipment Type	Number
Title 24 heating for R&D at PTE	1

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Summer

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

**10.1 Stationary Sources**

**Unmitigated/Mitigated**

Equipment Type	ROG	NOx	CO	SO2	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					
Emergency Generator - Diesel (750 - 9999 HP)	3.3928	64.3535	36.6928	0.0692		2.1169	2.1169		2.1169	2.1169						
Title 24 heating for R&D at PTE	5.4353	24.8512	83.0118	0.5929		7.5106	7.5106		7.5106	7.5106						
<b>Total</b>	<b>8.8281</b>	<b>89.2047</b>	<b>119.7046</b>	<b>0.6621</b>		<b>9.6275</b>	<b>9.6275</b>		<b>9.6275</b>	<b>9.6275</b>						

**11.0 Vegetation**

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Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**Merge 56, Proposed Unit 10**

San Diego County APCD Air District, Winter

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	610.00	1000sqft	2.71	610,000.00	0
Day-Care Center	8.00	1000sqft	0.18	8,000.00	0
Enclosed Parking with Elevator	617.10	1000sqft	0.93	617,103.00	0
Other Asphalt Surfaces	230.70	1000sqft	5.30	230,696.00	0
Unenclosed Parking with Elevator	309.69	1000sqft	0.00	309,690.00	0
Hotel	120.00	Room	0.85	131,031.00	0
Quality Restaurant	15.00	1000sqft	0.34	15,000.00	0
Apartments Low Rise	47.00	Dwelling Unit	0.36	61,537.00	134
Strip Mall	21.45	1000sqft	0.04	21,448.00	0
Strip Mall	5.55	1000sqft	0.01	5,552.00	0

**1.2 Other Project Characteristics**

Urbanization Urban Wind Speed (m/s) 2.6 Precipitation Freq (Days) 40  
 Climate Zone 13 Operational Year 2026

Utility Company San Diego Gas & Electric

CO2 Intensity 539.98 CH4 Intensity 0.033 N2O Intensity 0.004  
 (lb/MW/hr) (lb/MW/hr) (lb/MW/hr)

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

Project Characteristics -

Land Use - Per client info. 5550 sqft strip mall Land Use used for shopkeeper space.

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

Construction Phase - Site has already been cleared and grubbed, and rough grading has already occurred. Including Grading to ensure fine grading activity is covered.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Site has already been graded; grading and export not anticipated to be different from previous Approved Unit 10 uses. However, conservatively including acreage to ensure fine grading activity is covered.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces < 20% painted. Default non-residential area 395,516 sqft.

Vehicle Trips - Traffic from Trip Generation table in October 4, 2022 memo by Urban Systems Associates, Inc. Trip reductions have not been taken, as mixed use reduction is not applicable to projects proposing less than 100,000 sf commercial retail.

Woodstoves - No hearths.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces <20% painted.

Energy Use - HHW specifications for R&D buildings provided by client, placed under stationary sources. Title 24 NG removed to avoid double counting gas use.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction to be conservative.

Stationary Sources - Process Boilers -

Stationary Sources - User Defined - Title 24 heating placed here to show compliance with SDAPCD Rule 69.2.1: NOx limit of 20 ppmv from new equipment >400,000 to 2million BTU/hr. Other EFs per SDAPCD Calculation B16 NG Boiler 0.3-100-MMBTU, No controls.

Stationary Sources - Emergency Generators and Fire Pumps EF - Emergency Generator specs provided by client. Tier 2 EFs used for CO, NMHC+NOx (of which ROG=5%, NOx=95%), and PM. PM=PM10=PM2.5. TOG/ROG ratio from ARB. SDAPCD EFs for SO2.

Table Name	Column Name	Default Value	New Value
tbArchitecturalCoating	ConstArea_Nonresidential_Exterior	395,516.00	79,013.20
tbArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tbArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tbArchitecturalCoating	EF_Parking	250.00	100.00

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

tb\ArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tb\ArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tb\AreaCoating	Area_EF_Nonresidential_Exterior	250	50
tb\AreaCoating	Area_EF_Nonresidential_Interior	250	50
tb\AreaCoating	Area_EF_Parking	250	100
tb\AreaCoating	Area_EF_Residential_Exterior	250	50
tb\AreaCoating	Area_EF_Residential_Interior	250	50
tb\AreaCoating	Area_Nonresidential_Exterior	395516	79103
tb\AreaMitigation	UseLowVOCPaintParkingCheck	False	True
tb\ConstrDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb\ConstructionPhase	NumDays	20.00	78.00
tb\ConstructionPhase	PhaseEndDate	8/30/2024	11/20/2024
tb\ConstructionPhase	PhaseStartDate	8/3/2024	8/5/2024
tb\ConstructionPhase	PhaseStartDate	5/13/2023	5/15/2023
tb\ConstructionPhase	PhaseStartDate	7/6/2024	7/8/2024
tb\EnergyUse	T24NG	4.27	0.00
tb\Fireplaces	FireplaceDayYear	82.00	0.00
tb\Fireplaces	FireplaceHourDay	3.00	0.00
tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tb\Grading	AcresOfGrading	90.00	10.72
tb\LandUse	LandUseSquareFoot	617,100.00	617,103.00
tb\LandUse	LandUseSquareFoot	230,700.00	230,696.00
tb\LandUse	LandUseSquareFoot	174,240.00	131,031.00
tb\LandUse	LandUseSquareFoot	47,000.00	61,537.00
tb\LandUse	LandUseSquareFoot	21,450.00	21,448.00
tb\LandUse	LandUseSquareFoot	5,550.00	5,552.00

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

tblLandUse	LotAcreage	14.00	2.71
tblLandUse	LotAcreage	14.17	0.93
tblLandUse	LotAcreage	7.11	0.00
tblLandUse	LotAcreage	4.00	0.85
tblLandUse	LotAcreage	2.94	0.36
tblLandUse	LotAcreage	0.49	0.04
tblLandUse	LotAcreage	0.13	0.01
tblStationaryGeneratorsPumpSEF	ROG_EF	2.2480e-003	5.3000e-004
tblStationaryGeneratorsPumpSEF	TOG_EF	2.4700e-003	6.3000e-004
tblStationaryGeneratorsPumpUse	HorsePowerValue	0.00	2.923.00
tblStationaryGeneratorsPumpUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	6.22	80.00
tblVehicleTrips	ST_TR	8.19	8.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	ST_TR	1.90	8.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	5.84	80.00
tblVehicleTrips	SU_TR	5.95	8.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	SU_TR	1.11	8.00
tblVehicleTrips	SU_TR	20.43	40.00
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	47.62	80.00
tblVehicleTrips	WD_TR	8.36	8.00
tblVehicleTrips	WD_TR	83.84	100.00

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

tbVehicleTrips	WD_TR	11.26	8.00
tbVehicleTrips	WD_TR	44.32	40.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

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

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	4.2871	34.5538	39.3933	0.1475	8.6758	1.4254	9.4953	3.3947	1.3113	4.7061						
2024	47.2867	29.1738	38.0243	0.1445	8.6758	0.7318	9.4076	2.3509	0.6891	3.0400						
<b>Maximum</b>	<b>47.2867</b>	<b>34.5538</b>	<b>39.3933</b>	<b>0.1475</b>	<b>8.6758</b>	<b>1.4254</b>	<b>9.4953</b>	<b>3.3947</b>	<b>1.3113</b>	<b>4.7061</b>						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	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																
2023	4.2871	34.5538	39.3933	0.1475	8.6758	1.4254	9.4953	2.3509	1.3113	3.1227						
2024	47.2867	29.1738	38.0243	0.1445	8.6758	0.7318	9.4076	2.3509	0.6891	3.0400						
<b>Maximum</b>	<b>47.2867</b>	<b>34.5538</b>	<b>39.3933</b>	<b>0.1475</b>	<b>8.6758</b>	<b>1.4254</b>	<b>9.4953</b>	<b>2.3509</b>	<b>1.3113</b>	<b>3.1227</b>						



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.17	0.00	20.44	0.00	0.00	0.00	0.00	0.00	0.00

**2.2 Overall Operational**

**Unmitigated Operational**

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																
Area	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
Mobile	20.6470	20.3925	177.3508	0.3451	40.1121	0.2731	40.3852	10.6847	0.2546	10.9393						
Stationary	8.8281	89.2047	119.7046	0.6621		9.6275	9.6275		9.6275	9.6275						
<b>Total</b>	<b>49.7120</b>	<b>113.7283</b>	<b>304.5042</b>	<b>1.0319</b>	<b>40.1121</b>	<b>10.2339</b>	<b>50.3459</b>	<b>10.6847</b>	<b>10.2154</b>	<b>20.9001</b>						
lb/day																

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**2.2 Overall Operational**

**Mitigated Operational**

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															
Area	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Energy	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
Mobile	18.0868	16.1931	141.5155	0.2521	28.9083	0.2063	29.1146	7.7003	0.1922	7.8926						
Stationary	8.8281	89.2047	119.7046	0.6621		9.6275	9.6275		9.6275	9.6275						
<b>Total</b>	<b>47.1518</b>	<b>109.5290</b>	<b>268.6689</b>	<b>0.9389</b>	<b>28.9083</b>	<b>10.1671</b>	<b>39.0754</b>	<b>7.7003</b>	<b>10.1530</b>	<b>17.8533</b>						

Percent Reduction	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	5.15	3.69	11.77	9.01	27.93	0.65	22.39	27.93	0.61	14.58	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30	
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300	
3	Paving	Paving	7/8/2024	8/2/2024	5	20	
4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78	

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.72

Acres of Paving: 6.23

Residential Indoor: 124,612; Residential Outdoor: 41,537; Non-Residential Indoor: 1,186,547; Non-Residential Outdoor: 79,013; Striped Parking Area: 69,449 (Architectural Coating – sqft)

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	789.00	324.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	158.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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					
Fugitive Dust					6.4010	0.0000	6.4010	3.3512	0.0000	3.3512						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>6.4010</b>	<b>1.4245</b>	<b>7.8255</b>	<b>3.3512</b>	<b>1.3105</b>	<b>4.6617</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.2 Grading - 2023**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0593	0.0382	0.4561	1.3700e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0593</b>	<b>0.0382</b>	<b>0.4561</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

**Mitigated Construction On-Site**

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																
Fugitive Dust					2.4964	0.0000	2.4964	1.3070	0.0000	1.3070						
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105						
<b>Total</b>	<b>3.3217</b>	<b>34.5156</b>	<b>28.0512</b>	<b>0.0621</b>	<b>2.4964</b>	<b>1.4245</b>	<b>3.9209</b>	<b>1.3070</b>	<b>1.3105</b>	<b>2.6175</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.2 Grading - 2023**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0593	0.0382	0.4561	1.3700e-003	0.1643	8.8000e-004	0.1652	0.0436	8.1000e-004	0.0444						
<b>Total</b>	<b>0.0593</b>	<b>0.0382</b>	<b>0.4561</b>	<b>1.3700e-003</b>	<b>0.1643</b>	<b>8.8000e-004</b>	<b>0.1652</b>	<b>0.0436</b>	<b>8.1000e-004</b>	<b>0.0444</b>						

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2023**

**Unmitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3763	14.4736	5.1564	0.0664	2.1943	0.0850	2.2794	0.6317	0.0813	0.7131						
Worker	2.3381	1.5058	17.9929	0.0541	6.4815	0.0348	6.5162	1.7192	0.0320	1.7512						
<b>Total</b>	<b>2.7143</b>	<b>15.9794</b>	<b>23.1493</b>	<b>0.1206</b>	<b>8.6758</b>	<b>0.1198</b>	<b>8.7956</b>	<b>2.3509</b>	<b>0.1133</b>	<b>2.4642</b>						

**Mitigated Construction On-Site**

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																
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584						
<b>Total</b>	<b>1.5728</b>	<b>14.3849</b>	<b>16.2440</b>	<b>0.0269</b>		<b>0.6997</b>	<b>0.6997</b>		<b>0.6584</b>	<b>0.6584</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2023**

**Mitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3763	14.4736	5.1564	0.0664	2.1943	0.0850	2.2794	0.6317	0.0813	0.7131						
Worker	2.3381	1.5058	17.9929	0.0541	6.4815	0.0348	6.5162	1.7192	0.0320	1.7512						
<b>Total</b>	<b>2.7143</b>	<b>15.9794</b>	<b>23.1493</b>	<b>0.1206</b>	<b>8.6758</b>	<b>0.1198</b>	<b>8.7956</b>	<b>2.3509</b>	<b>0.1133</b>	<b>2.4642</b>						

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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																
Off-Road	1.4716	13.4438	16.1668	0.0270	0.6133	0.6133	0.6133	0.5769	0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.5769</b>	<b>0.5769</b>	<b>0.5769</b>						



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3612	14.3762	5.0387	0.0652	2.1944	0.0854	2.2798	0.6317	0.0817	0.7134						
Worker	2.2009	1.3539	16.8188	0.0524	6.4815	0.0331	6.5145	1.7192	0.0305	1.7496						
<b>Total</b>	<b>2.5621</b>	<b>15.7300</b>	<b>21.8575</b>	<b>0.1175</b>	<b>8.6758</b>	<b>0.1185</b>	<b>8.7943</b>	<b>2.3509</b>	<b>0.1122</b>	<b>2.4631</b>						

**Mitigated Construction On-Site**

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																
Off-Road	1.4716	13.4438	16.1668	0.0270	0.6133	0.6133	0.6133	0.5769	0.5769	0.5769						
<b>Total</b>	<b>1.4716</b>	<b>13.4438</b>	<b>16.1668</b>	<b>0.0270</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.6133</b>	<b>0.5769</b>	<b>0.5769</b>	<b>0.5769</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.3 Building Construction - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.3612	14.3762	5.0387	0.0652	2.1944	0.0854	2.2798	0.6317	0.0817	0.7134						
Worker	2.2009	1.3539	16.8188	0.0524	6.4815	0.0331	6.5145	1.7192	0.0305	1.7496						
<b>Total</b>	<b>2.5621</b>	<b>15.7300</b>	<b>21.8575</b>	<b>0.1175</b>	<b>8.6758</b>	<b>0.1185</b>	<b>8.7943</b>	<b>2.3509</b>	<b>0.1122</b>	<b>2.4631</b>						

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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																
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.6943					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.6825</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.4 Paving - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0418	0.0257	0.3198	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0418</b>	<b>0.0257</b>	<b>0.3198</b>	<b>1.0000e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

**Mitigated Construction On-Site**

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																
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310						
Paving	0.6943					0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>1.6825</b>	<b>9.5246</b>	<b>14.6258</b>	<b>0.0228</b>		<b>0.4685</b>	<b>0.4685</b>		<b>0.4310</b>	<b>0.4310</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.4 Paving - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.0418	0.0257	0.3198	1.0000e-003	0.1232	6.3000e-004	0.1239	0.0327	5.8000e-004	0.0333						
<b>Total</b>	<b>0.0418</b>	<b>0.0257</b>	<b>0.3198</b>	<b>1.0000e-003</b>	<b>0.1232</b>	<b>6.3000e-004</b>	<b>0.1239</b>	<b>0.0327</b>	<b>5.8000e-004</b>	<b>0.0333</b>						

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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																
Archit. Coating	46.6652					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609	0.0609	0.0609	0.0609						
<b>Total</b>	<b>46.8459</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.4407	0.2711	3.3680	0.0105	1.2979	6.6200e-003	1.3046	0.3443	6.1000e-003	0.3504						
<b>Total</b>	<b>0.4407</b>	<b>0.2711</b>	<b>3.3680</b>	<b>0.0105</b>	<b>1.2979</b>	<b>6.6200e-003</b>	<b>1.3046</b>	<b>0.3443</b>	<b>6.1000e-003</b>	<b>0.3504</b>						

**Mitigated Construction On-Site**

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																
Archit. Coating	46.6652					0.0000	0.0000		0.0000	0.0000						
Off-Road	0.1808	1.2188	1.8101	2.9700e-003	0.0609	0.0609	0.0609	0.0609	0.0609	0.0609						
<b>Total</b>	<b>46.8459</b>	<b>1.2188</b>	<b>1.8101</b>	<b>2.9700e-003</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>	<b>0.0609</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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																
Hauling	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						
Worker	0.4407	0.2711	3.3680	0.0105	1.2979	6.6200e-003	1.3046	0.3443	6.1000e-003	0.3504						
<b>Total</b>	<b>0.4407</b>	<b>0.2711</b>	<b>3.3680</b>	<b>0.0105</b>	<b>1.2979</b>	<b>6.6200e-003</b>	<b>1.3046</b>	<b>0.3443</b>	<b>6.1000e-003</b>	<b>0.3504</b>						

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Increase Density
- Increase Diversity
- Improve Walkability Design
- Integrate Below Market Rate Housing
- Improve Pedestrian Network

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

Category	lb/day											lb/day				
	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated	18.0868	16.1931	141.5155	0.2521	28.9083	0.2063	29.1146	7.7003	0.1922	7.8926						
Unmitigated	20.6470	20.3925	177.3508	0.3451	40.1121	0.2731	40.3852	10.6847	0.2546	10.9393						

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartments Low Rise	282.00	282.00	282.00	805,196	580,295
Day-Care Center	640.00	640.00	640.00	753,683	543,170
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	960.00	960.00	960.00	1,823,934	1,314,488
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	1,500.00	1,500.00	1,500.00	1,779,250	1,282,285
Research & Development	4,880.00	4,880.00	4,880.00	12,230,487	8,814,370
Strip Mall	858.00	858.00	858.00	1,321,348	952,280
Strip Mall	222.00	222.00	222.00	341,887	246,394
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>19,055,785</b>	<b>13,733,283</b>

**4.3 Trip Type Information**

	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 Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not 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	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	9.50	7.30	7.30	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
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Day-Care Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Other Asphalt Surfaces	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Quality Restaurant	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Research & Development	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Unenclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24



Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

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															
Natural Gas Mitigated	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						
Natural Gas Unmitigated	0.4502	4.0848	3.3776	0.0246		0.3111	0.3111		0.3111	0.3111						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

Land Use	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
	kBTU/yr	lb/day															
Apartments Low Rise	1402.83	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
Day-Care Center	128.438	1.3900e-003	0.0126	0.0106	8.0000e-005	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004						
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						
Hotel	20785.5	0.2242	2.0378	1.7117	0.0122	0.1549	0.1549	0.1549	0.1549	0.1549	0.1549						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Quality Restaurant	7151.51	0.0771	0.7011	0.5890	4.2100e-003	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533						
Research & Development	12116.4	0.1307	1.1879	0.9978	7.1300e-003	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903						
Strip Mall	130.451	1.4100e-003	0.0128	0.0107	8.0000e-005	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004						
Strip Mall	33.7683	3.6000e-004	3.3100e-003	2.7800e-003	2.0000e-005	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004						
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>		<b>0.4502</b>	<b>4.0848</b>	<b>3.3776</b>	<b>0.0246</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	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
	kBTU/yr	lb/day															
Apartments Low Rise	1.40283	0.0151	0.1293	0.0550	8.3000e-004	0.0105	0.0105	0.0105	0.0105	0.0105	0.0105						
Day-Care Center	0.128438	1.3900e-003	0.0126	0.0106	8.0000e-005	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004	9.6000e-004						
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						
Hotel	20.7855	0.2242	2.0378	1.7117	0.0122	0.1549	0.1549	0.1549	0.1549	0.1549	0.1549						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Quality Restaurant	7.15151	0.0771	0.7011	0.5890	4.2100e-003	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533						
Research & Development	12.1164	0.1307	1.1879	0.9978	7.1300e-003	0.0903	0.0903	0.0903	0.0903	0.0903	0.0903						
Shpp Mall	0.0337683	3.6000e-004	3.3100e-003	2.7800e-003	2.0000e-005	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004	2.5000e-004						
Shpp Mall	0.130451	1.4100e-003	0.0128	0.0107	8.0000e-005	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004	9.7000e-004						
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>		<b>0.4502</b>	<b>4.0848</b>	<b>3.3776</b>	<b>0.0246</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>	<b>0.3111</b>						

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Electric Lawnmower

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

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															
Mitigated	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
Unmitigated	19.7867	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**6.2 Area by SubCategory**

**Unmitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.9973					0.0000	0.0000		0.0000	0.0000						
Consumer Products	18.6549					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						
Landscaping	0.1345	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>19.7867</b>	<b>0.0464</b>	<b>4.0712</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	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															
Architectural Coating	0.9973					0.0000	0.0000		0.0000	0.0000						
Consumer Products	18.6549					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						
Landscaping	0.1345	0.0464	4.0712	2.2000e-004		0.0222	0.0222		0.0222	0.0222						
<b>Total</b>	<b>19.7867</b>	<b>0.0464</b>	<b>4.0712</b>	<b>2.2000e-004</b>		<b>0.0222</b>	<b>0.0222</b>		<b>0.0222</b>	<b>0.0222</b>						

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

Institute Recycling and Composting Services

**9.0 Operational Offroad**

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

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**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	1	50	2923		0.73 Diesel

**Boilers**

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

Equipment Type	Number
Title 24 heating for R&D at PTE	1

Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Winter

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

**10.1 Stationary Sources**

**Unmitigated/Mitigated**

Equipment Type	ROG	NOx	CO	SO2	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															
Emergency Generator - Diesel (750 - 9999 HP)	3.3928	64.3535	36.6928	0.0692		2.1169	2.1169		2.1169	2.1169						
Title 24 heating for R&D at PTE	5.4353	24.8512	83.0118	0.5929		7.5106	7.5106		7.5106	7.5106						
<b>Total</b>	<b>8.8281</b>	<b>89.2047</b>	<b>119.7046</b>	<b>0.6621</b>		<b>9.6275</b>	<b>9.6275</b>		<b>9.6275</b>	<b>9.6275</b>						

**11.0 Vegetation**

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Merge 56, Proposed Unit 10 - San Diego County APCD Air District, Annual

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

**Merge 56, Proposed Unit 10**

San Diego County APCD Air District, Annual

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Research & Development	610.00	1000sqft	2.71	610,000.00	0
Day-Care Center	8.00	1000sqft	0.18	8,000.00	0
Enclosed Parking with Elevator	617.10	1000sqft	0.93	617,103.00	0
Other Asphalt Surfaces	230.70	1000sqft	5.30	230,696.00	0
Unenclosed Parking with Elevator	309.69	1000sqft	0.00	309,690.00	0
Hotel	120.00	Room	0.85	131,031.00	0
Quality Restaurant	15.00	1000sqft	0.34	15,000.00	0
Apartments Low Rise	47.00	Dwelling Unit	0.36	61,537.00	134
Strip Mall	21.45	1000sqft	0.04	21,448.00	0
Strip Mall	5.55	1000sqft	0.01	5,552.00	0

**1.2 Other Project Characteristics**

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13	Operational Year	2026		

Utility Company San Diego Gas & Electric

CO2 Intensity (lb/MW/hr)	539.98	CH4 Intensity (lb/MW/hr)	0.033	N2O Intensity (lb/MW/hr)	0.004
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**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -

Land Use - Per client info. 5550 sqft strip mall Land Use used for shopkeeper space.

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

Construction Phase - Site has already been cleared and grubbed, and rough grading has already occurred. Including Grading to ensure fine grading activity is covered.

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Grading - Site has already been graded; grading and export not anticipated to be different from previous Approved Unit 10 uses. However, conservatively including acreage to ensure fine grading activity is covered.

Architectural Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces < 20% painted. Default non-residential area 395,516 sqft.

Vehicle Trips - Traffic from Trip Generation table in October 4, 2022 memo by Urban Systems Associates, Inc. Trip reductions have not been taken, as mixed use reduction is not applicable to projects proposing less than 100,000 sf commercial retail.

Woodstoves - No hearths.

Area Coating - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC. Non-residential exterior surfaces <20% painted.

Energy Use - HHW specifications for R&D buildings provided by client, placed under stationary sources. Title 24 NG removed to avoid double counting gas use.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - SDAPCD Rule 67.0.1. Architectural Coatings: 50 g/L VOC will be applied for interior and exterior paint. Traffic markings paints are listed as 100 g/L VOC.

Energy Mitigation -

Waste Mitigation - AB341 specifies a state-wide 75% waste reduction goal by 2020. Assume 65% reduction to be conservative.

Stationary Sources - Process Boilers -

Stationary Sources - User Defined - Title 24 heating placed here to show compliance with SDAPCD Rule 69.2.1: NOx limit of 20 ppmv from new equipment >400,000 to 2million BTU/hr. Other EFs per SDAPCD Calculation B16 NG Boiler 0.3-100-MMBTU, No controls.

Stationary Sources - Emergency Generators and Fire Pumps EF - Emergency Generator specs provided by client. Tier 2 EFs used for CO, NMHC+NOx (of which ROG=5%, NOx=95%), and PM. PM=PM10=PM2.5. TOG/ROG ratio from ARB. SDAPCD EFs for SO2.

Table Name	Column Name	Default Value	New Value
tbArchitecturalCoating	ConstArea_Nonresidential_Exterior	395,516.00	79,013.20
tbArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tbArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tbArchitecturalCoating	EF_Parking	250.00	100.00

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tb\ArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tb\ArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tb\AreaCoating	Area_EF_Nonresidential_Exterior	250	50
tb\AreaCoating	Area_EF_Nonresidential_Interior	250	50
tb\AreaCoating	Area_EF_Parking	250	100
tb\AreaCoating	Area_EF_Residential_Exterior	250	50
tb\AreaCoating	Area_EF_Residential_Interior	250	50
tb\AreaCoating	Area_Nonresidential_Exterior	395516	79103
tb\AreaMitigation	UseLowVOCPaintParkingCheck	False	True
tb\ConstrDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tb\ConstructionPhase	NumDays	20.00	78.00
tb\ConstructionPhase	PhaseEndDate	8/30/2024	11/20/2024
tb\ConstructionPhase	PhaseStartDate	8/3/2024	8/5/2024
tb\ConstructionPhase	PhaseStartDate	5/13/2023	5/15/2023
tb\ConstructionPhase	PhaseStartDate	7/6/2024	7/8/2024
tb\EnergyUse	T24NG	4.27	0.00
tb\Fireplaces	FireplaceDayYear	82.00	0.00
tb\Fireplaces	FireplaceHourDay	3.00	0.00
tb\Fireplaces	FireplaceWoodMass	3,078.40	0.00
tb\Fireplaces	NumberGas	25.85	0.00
tb\Fireplaces	NumberNoFireplace	4.70	0.00
tb\Fireplaces	NumberWood	16.45	0.00
tb\Grading	AcresOfGrading	90.00	10.72
tb\LandUse	LandUseSquareFoot	617,100.00	617,103.00
tb\LandUse	LandUseSquareFoot	230,700.00	230,696.00
tb\LandUse	LandUseSquareFoot	174,240.00	131,031.00
tb\LandUse	LandUseSquareFoot	47,000.00	61,537.00
tb\LandUse	LandUseSquareFoot	21,450.00	21,448.00
tb\LandUse	LandUseSquareFoot	5,550.00	5,552.00

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

tblLandUse	LotAcreage	14.00	2.71
tblLandUse	LotAcreage	14.17	0.93
tblLandUse	LotAcreage	7.11	0.00
tblLandUse	LotAcreage	4.00	0.85
tblLandUse	LotAcreage	2.94	0.36
tblLandUse	LotAcreage	0.49	0.04
tblLandUse	LotAcreage	0.13	0.01
tblStationaryGeneratorsPumpSEF	ROG_EF	2.2480e-003	5.3000e-004
tblStationaryGeneratorsPumpSEF	TOG_EF	2.4700e-003	6.3000e-004
tblStationaryGeneratorsPumpUse	HorsePowerValue	0.00	2.923.00
tblStationaryGeneratorsPumpUse	HoursPerDay	0.00	1.00
tblStationaryGeneratorsPumpUse	HoursPerYear	0.00	50.00
tblStationaryGeneratorsPumpUse	NumberOfEquipment	0.00	3.00
tblVehicleTrips	ST_TR	8.14	6.00
tblVehicleTrips	ST_TR	6.22	80.00
tblVehicleTrips	ST_TR	8.19	8.00
tblVehicleTrips	ST_TR	90.04	100.00
tblVehicleTrips	ST_TR	1.90	8.00
tblVehicleTrips	ST_TR	42.04	40.00
tblVehicleTrips	SU_TR	6.28	6.00
tblVehicleTrips	SU_TR	5.84	80.00
tblVehicleTrips	SU_TR	5.95	8.00
tblVehicleTrips	SU_TR	71.97	100.00
tblVehicleTrips	SU_TR	1.11	8.00
tblVehicleTrips	SU_TR	20.43	40.00
tblVehicleTrips	WD_TR	7.32	6.00
tblVehicleTrips	WD_TR	47.62	80.00
tblVehicleTrips	WD_TR	8.36	8.00
tblVehicleTrips	WD_TR	83.84	100.00

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tbVehicleTrips	WD_TR	11.26	8.00
tbVehicleTrips	WD_TR	44.32	40.00
tbWoodstoves	NumberCatalytic	2.35	0.00
tbWoodstoves	NumberNoncatalytic	2.35	0.00
tbWoodstoves	WoodstoveDayYear	82.00	0.00
tbWoodstoves	WoodstoveWoodMass	3,019.20	0.00

**2.0 Emissions Summary**

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

**2.1 Overall Construction**

**Unmitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
2023	0.3878	3.0136	3.6696	0.0132	0.7979	0.0890	0.8869	0.2409	0.0833	0.3242						
2024	2.1192	2.1148	2.9109	0.0106	0.6229	0.0567	0.6796	0.1689	0.0534	0.2223						
<b>Maximum</b>	<b>2.1192</b>	<b>3.0136</b>	<b>3.6696</b>	<b>0.0132</b>	<b>0.7979</b>	<b>0.0890</b>	<b>0.8869</b>	<b>0.2409</b>	<b>0.0833</b>	<b>0.3242</b>						

**Mitigated Construction**

Year	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
2023	0.3878	3.0136	3.6696	0.0132	0.7393	0.0890	0.8283	0.2102	0.0833	0.2935						
2024	2.1192	2.1148	2.9109	0.0106	0.6229	0.0567	0.6796	0.1689	0.0534	0.2223						
<b>Maximum</b>	<b>2.1192</b>	<b>3.0136</b>	<b>3.6696</b>	<b>0.0132</b>	<b>0.7393</b>	<b>0.0890</b>	<b>0.8283</b>	<b>0.2102</b>	<b>0.0833</b>	<b>0.2935</b>						

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

	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	4.12	0.00	3.74	7.48	0.00	5.61	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)							Maximum Mitigated ROG + NOX (tons/quarter)					
1	4-3-2023	7-2-2023	1.1321							1.1321					
2	7-3-2023	10-2-2023	1.1089							1.1089					
3	10-3-2023	1-2-2024	1.1375							1.1375					
4	1-3-2024	4-2-2024	1.0786							1.0786					
5	4-3-2024	7-2-2024	1.0501							1.0501					
6	7-3-2024	9-30-2024	1.1309							1.1309					
		Highest	1.1375							1.1375					

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

**2.2 Overall Operational**

**Unmitigated Operational**

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
tons/yr																
Area	3.5986	4.1800e-003	0.3664	2.0000e-005	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003						
Energy	0.0822	0.7455	0.6164	4.4800e-003	0.0568	0.0568	0.0568	0.0568	0.0568	0.0568						
Mobile	3.6867	3.6641	31.5100	0.0632	7.1278	0.0496	7.1775	1.9023	0.0463	1.9485						
Stationary	1.0767	6.1442	16.0669	0.1099		1.4236	1.4236		1.4236	1.4236						
Waste						0.0000	0.0000		0.0000	0.0000						
Water						0.0000	0.0000		0.0000	0.0000						
<b>Total</b>	<b>8.4443</b>	<b>10.5580</b>	<b>48.5598</b>	<b>0.1776</b>	<b>7.1278</b>	<b>1.5320</b>	<b>8.6599</b>	<b>1.9023</b>	<b>1.5287</b>	<b>3.4309</b>						
MT/yr																



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

**2.2 Overall Operational**

**Mitigated Operational**

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
tons/yr																
Area	3.5986	4.1800e-003	0.3664	2.0000e-005	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003	2.0000e-003						
Energy	0.0822	0.7455	0.6164	4.4800e-003	0.0568	0.0568	0.0568	0.0568	0.0568	0.0568						
Mobile	3.2258	2.9042	25.0390	0.0461	5.1370	0.0375	5.1744	1.3709	0.0349	1.4059						
Stationary	1.0767	6.1442	16.0669	0.1099	1.4236	1.4236	1.4236	1.4236	1.4236	1.4236						
Waste					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Water					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>	<b>7.9833</b>	<b>9.7981</b>	<b>42.0887</b>	<b>0.1606</b>	<b>5.1370</b>	<b>1.5199</b>	<b>6.6568</b>	<b>1.3709</b>	<b>1.5173</b>	<b>2.8883</b>						

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	5.46	7.20	13.33	9.59	27.93	0.79	23.13	27.93	0.74	15.82	0.00	0.00	0.00	0.00	0.00	0.00

**3.0 Construction Detail**

**Construction Phase**

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	4/3/2023	5/12/2023	5	30	
2	Building Construction	Building Construction	5/15/2023	7/5/2024	5	300	

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

3	Paving	Paving	7/8/2024	8/2/2024	5	20
4	Architectural Coating	Architectural Coating	8/5/2024	11/20/2024	5	78

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10.72

Acres of Paving: 6.23

Residential Indoor: 124,612; Residential Outdoor: 41,537; Non-Residential Indoor: 1,186,547; Non-Residential Outdoor: 79,013; Striped Parking Area: 69,449 (Architectural Coating – sqft)

**OffRoad Equipment**

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

**Trips and VMT**

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	789.00	324.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	158.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

**3.2 Grading - 2023**

**Unmitigated Construction On-Site**

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
Fugitive Dust					0.0960	0.0000	0.0960	0.0503	0.0000	0.0503						
Off-Road	0.0498	0.5177	0.4208	9.3000e-004	0.0214	0.0214	0.0214	0.0197	0.0197	0.0197						
<b>Total</b>	<b>0.0498</b>	<b>0.5177</b>	<b>0.4208</b>	<b>9.3000e-004</b>	<b>0.0960</b>	<b>0.0214</b>	<b>0.1174</b>	<b>0.0503</b>	<b>0.0197</b>	<b>0.0699</b>						

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**3.2 Grading - 2023**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	8.1000e-004	5.6000e-004	6.8400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004						
<b>Total</b>	<b>8.1000e-004</b>	<b>5.6000e-004</b>	<b>6.8400e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>1.0000e-005</b>	<b>2.4200e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Fugitive Dust					0.0375	0.0000	0.0375	0.0196	0.0000	0.0196						
Off-Road	0.0498	0.5177	0.4208	9.3000e-004	0.0214	0.0214	0.0214	0.0197	0.0197	0.0197						
<b>Total</b>	<b>0.0498</b>	<b>0.5177</b>	<b>0.4208</b>	<b>9.3000e-004</b>	<b>0.0375</b>	<b>0.0214</b>	<b>0.0588</b>	<b>0.0196</b>	<b>0.0197</b>	<b>0.0393</b>						

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**3.2 Grading - 2023**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	8.1000e-004	5.6000e-004	6.8400e-003	2.0000e-005	2.4100e-003	1.0000e-005	2.4200e-003	6.4000e-004	1.0000e-005	6.5000e-004						
<b>Total</b>	<b>8.1000e-004</b>	<b>5.6000e-004</b>	<b>6.8400e-003</b>	<b>2.0000e-005</b>	<b>2.4100e-003</b>	<b>1.0000e-005</b>	<b>2.4200e-003</b>	<b>6.4000e-004</b>	<b>1.0000e-005</b>	<b>6.5000e-004</b>						

**3.3 Building Construction - 2023**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	0.1298	1.1868	1.3401	2.2200e-003	0.0577	0.0577	0.0577	0.0543	0.0543	0.0543						
<b>Total</b>	<b>0.1298</b>	<b>1.1868</b>	<b>1.3401</b>	<b>2.2200e-003</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0543</b>	<b>0.0543</b>	<b>0.0543</b>						

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

**3.3 Building Construction - 2023**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0314	1.1867	0.4185	5.4800e-003	0.1775	7.0000e-003	0.1845	0.0513	6.6900e-003	0.0579						
Worker	0.1760	0.1218	1.4834	4.5000e-003	0.5220	2.8700e-003	0.5249	0.1387	2.6400e-003	0.1414						
<b>Total</b>	<b>0.2074</b>	<b>1.3085</b>	<b>1.9019</b>	<b>9.9800e-003</b>	<b>0.6995</b>	<b>9.8700e-003</b>	<b>0.7093</b>	<b>0.1900</b>	<b>9.3300e-003</b>	<b>0.1993</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	0.1298	1.1868	1.3401	2.2200e-003	0.0577	0.0577	0.0577	0.0543	0.0543	0.0543						
<b>Total</b>	<b>0.1298</b>	<b>1.1868</b>	<b>1.3401</b>	<b>2.2200e-003</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0577</b>	<b>0.0543</b>	<b>0.0543</b>	<b>0.0543</b>						

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

**3.3 Building Construction - 2023**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0314	1.1867	0.4185	5.4800e-003	0.1775	7.0000e-003	0.1845	0.0513	6.6900e-003	0.0579						
Worker	0.1760	0.1218	1.4834	4.5000e-003	0.5220	2.8700e-003	0.5249	0.1387	2.6400e-003	0.1414						
<b>Total</b>	<b>0.2074</b>	<b>1.3085</b>	<b>1.9019</b>	<b>9.9800e-003</b>	<b>0.6995</b>	<b>9.8700e-003</b>	<b>0.7093</b>	<b>0.1900</b>	<b>9.3300e-003</b>	<b>0.1993</b>						

**3.3 Building Construction - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	0.0993	0.9075	1.0913	1.8200e-003	0.0414	0.0414	0.0414	0.0389	0.0389	0.0389						
<b>Total</b>	<b>0.0993</b>	<b>0.9075</b>	<b>1.0913</b>	<b>1.8200e-003</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0389</b>	<b>0.0389</b>	<b>0.0389</b>						

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**3.3 Building Construction - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0247	0.9643	0.3345	4.4000e-003	0.1452	5.7500e-003	0.1510	0.0419	5.5000e-003	0.0474						
Worker	0.1353	0.0896	1.1339	3.5600e-003	0.4271	2.2300e-003	0.4293	0.1135	2.0600e-003	0.1155						
<b>Total</b>	<b>0.1600</b>	<b>1.0539</b>	<b>1.4684</b>	<b>7.9600e-003</b>	<b>0.5723</b>	<b>7.9800e-003</b>	<b>0.5803</b>	<b>0.1554</b>	<b>7.5600e-003</b>	<b>0.1630</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	0.0993	0.9075	1.0913	1.8200e-003	0.0414	0.0414	0.0414	0.0389	0.0389	0.0389						
<b>Total</b>	<b>0.0993</b>	<b>0.9075</b>	<b>1.0913</b>	<b>1.8200e-003</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0414</b>	<b>0.0389</b>	<b>0.0389</b>	<b>0.0389</b>						



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**3.3 Building Construction - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Vendor	0.0247	0.9643	0.3345	4.4000e-003	0.1452	5.7500e-003	0.1510	0.0419	5.5000e-003	0.0474						
Worker	0.1353	0.0896	1.1339	3.5600e-003	0.4271	2.2300e-003	0.4293	0.1135	2.0600e-003	0.1155						
<b>Total</b>	<b>0.1600</b>	<b>1.0539</b>	<b>1.4684</b>	<b>7.9600e-003</b>	<b>0.5723</b>	<b>7.9800e-003</b>	<b>0.5803</b>	<b>0.1554</b>	<b>7.5600e-003</b>	<b>0.1630</b>						

**3.4 Paving - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004	4.6900e-003	4.6900e-003	4.6900e-003	4.3100e-003	4.3100e-003	4.3100e-003						
Paving	6.9400e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>	<b>0.0168</b>	<b>0.0953</b>	<b>0.1463</b>	<b>2.3000e-004</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>						

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

**3.4 Paving - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	3.8000e-004	2.5000e-004	3.1900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004						
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Off-Road	9.8800e-003	0.0953	0.1463	2.3000e-004	4.6900e-003	4.6900e-003	4.6900e-003	4.3100e-003	4.3100e-003	4.3100e-003						
Paving	6.9400e-003				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>	<b>0.0168</b>	<b>0.0953</b>	<b>0.1463</b>	<b>2.3000e-004</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.6900e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>	<b>4.3100e-003</b>						
MT/yr																

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

**3.4 Paving - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	3.8000e-004	2.5000e-004	3.1900e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.3000e-004						
<b>Total</b>	<b>3.8000e-004</b>	<b>2.5000e-004</b>	<b>3.1900e-003</b>	<b>1.0000e-005</b>	<b>1.2000e-003</b>	<b>1.0000e-005</b>	<b>1.2100e-003</b>	<b>3.2000e-004</b>	<b>1.0000e-005</b>	<b>3.3000e-004</b>						

**3.5 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

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
tons/yr																
Archit. Coating	1.8199					0.0000	0.0000		0.0000	0.0000						
Off-Road	7.0500e-003	0.0475	0.0706	1.2000e-004	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003						
<b>Total</b>	<b>1.8270</b>	<b>0.0475</b>	<b>0.0706</b>	<b>1.2000e-004</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>						

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

**3.5 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	0.0157	0.0104	0.1312	4.1000e-004	0.0494	2.6000e-004	0.0497	0.0131	2.4000e-004	0.0134						
<b>Total</b>	<b>0.0157</b>	<b>0.0104</b>	<b>0.1312</b>	<b>4.1000e-004</b>	<b>0.0494</b>	<b>2.6000e-004</b>	<b>0.0497</b>	<b>0.0131</b>	<b>2.4000e-004</b>	<b>0.0134</b>						

**Mitigated Construction On-Site**

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
tons/yr																
Archit. Coating	1.8199				0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Off-Road	7.0500e-003	0.0475	0.0706	1.2000e-004	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003	2.3800e-003						
<b>Total</b>	<b>1.8270</b>	<b>0.0475</b>	<b>0.0706</b>	<b>1.2000e-004</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>	<b>2.3800e-003</b>						
MT/yr																

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

**3.5 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

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
tons/yr																
Hauling	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						
Worker	0.0157	0.0104	0.1312	4.1000e-004	0.0494	2.6000e-004	0.0497	0.0131	2.4000e-004	0.0134						
<b>Total</b>	<b>0.0157</b>	<b>0.0104</b>	<b>0.1312</b>	<b>4.1000e-004</b>	<b>0.0494</b>	<b>2.6000e-004</b>	<b>0.0497</b>	<b>0.0131</b>	<b>2.4000e-004</b>	<b>0.0134</b>						
MT/yr																

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

- Increase Density
- Increase Diversity
- Improve Walkability Design
- Integrate Below Market Rate Housing
- Improve Pedestrian Network

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

Category	tons/yr											MT/yr				
	ROG	NOX	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio-CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Mitigated	3.2258	2.9042	25.0390	0.0461	5.1370	0.0375	5.1744	1.3709	0.0349	1.4059						
Unmitigated	3.6867	3.6641	31.5100	0.0632	7.1278	0.0496	7.1775	1.9023	0.0463	1.9485						

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Apartment Low Rise	282.00	282.00	282.00	805,196	580,295
Day-Care Center	640.00	640.00	640.00	753,683	543,170
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hotel	960.00	960.00	960.00	1,823,934	1,314,488
Other Asphalt Surfaces	0.00	0.00	0.00		
Quality Restaurant	1,500.00	1,500.00	1,500.00	1,779,250	1,282,285
Research & Development	4,880.00	4,880.00	4,880.00	12,230,487	8,814,370
Strip Mall	858.00	858.00	858.00	1,321,348	952,280
Strip Mall	222.00	222.00	222.00	341,887	246,394
Unenclosed Parking with Elevator	0.00	0.00	0.00		
<b>Total</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>9,342.00</b>	<b>19,055,785</b>	<b>13,733,283</b>

**4.3 Trip Type Information**

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartment Low Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Day-Care Center	9.50	7.30	7.30	12.70	82.30	5.00	28	58	14

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Hotel	9.50	7.30	7.30	19.40	61.60	19.00	58	38	4
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Research & Development	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Strip Mall	9.50	7.30	7.30	16.60	64.40	19.00	45	40	15
Unenclosed Parking with	9.50	7.30	7.30	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
Apartments Low Rise	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Day-Care Center	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Enclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Hotel	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Other Asphalt Surfaces	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Quality Restaurant	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Research & Development	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Strip Mall	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559
Unenclosed Parking with Elevator	0.565387	0.062253	0.175474	0.116234	0.023574	0.006359	0.009156	0.006316	0.000699	0.000586	0.028465	0.000937	0.004559

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Exceed Title 24

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

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
tons/yr											MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000						
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000						
NaturalGas Mitigated	0.0822	0.7455	0.6164	4.4800e-003		0.0568	0.0568		0.0568	0.0568						
NaturalGas Unmitigated	0.0822	0.7455	0.6164	4.4800e-003		0.0568	0.0568		0.0568	0.0568						



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

**5.2 Energy by Land Use - NaturalGas**

**Unmitigated**

Land Use	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	
	KBTU/yr																	MT/yr
Apartment's Low Rise	512034	2.7600e-003	0.0236	0.0100	1.5000e-004	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003							
Day-Care Center	46880	2.5000e-004	2.3000e-003	1.9300e-003	1.0000e-005	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004							
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							
Hotel	7.58669e+006	0.0409	0.3719	0.3124	2.2300e-003	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283							
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
Quality Restaurant	2.6103e+006	0.0141	0.1280	0.1075	7.7000e-004	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003							
Research & Development	4.4225e+006	0.0239	0.2168	0.1821	1.3000e-003	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165							
Strip Mall	12325.4	7.0000e-005	6.0000e-004	5.1000e-004	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005							
Strip Mall	47614.6	2.6000e-004	2.3300e-003	1.9600e-003	1.0000e-005	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004							
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000							
<b>Total</b>		<b>0.0822</b>	<b>0.7455</b>	<b>0.6164</b>	<b>4.4700e-003</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>							

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

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

Land Use	NaturalGas Use KBTU/yr	ROG	NOx	CO	SO2	Fugitive PM10 tons/yr	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4 MT/yr	N2O	CO2e
Apartments Low Rise	512034	2.7600e-003	0.0236	0.0100	1.5000e-004	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003	1.9100e-003						
Day-Care Center	46880	2.5000e-004	2.3000e-003	1.9300e-003	1.0000e-005	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004	1.7000e-004						
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						
Hotel	7.58669e+006	0.0409	0.3719	0.3124	2.2300e-003	0.0283	0.0283	0.0283	0.0283	0.0283	0.0283						
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
Quality Restaurant	2.6103e+006	0.0141	0.1280	0.1075	7.7000e-004	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003	9.7200e-003						
Research & Development	4.4225e+006	0.0239	0.2168	0.1821	1.3000e-003	0.0165	0.0165	0.0165	0.0165	0.0165	0.0165						
Strip Mall	12325.4	7.0000e-005	6.0000e-004	5.1000e-004	0.0000	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005	5.0000e-005						
Strip Mall	47614.6	2.6000e-004	2.3300e-003	1.9600e-003	1.0000e-005	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004	1.8000e-004						
Unenclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000						
<b>Total</b>		<b>0.0822</b>	<b>0.7455</b>	<b>0.6164</b>	<b>4.4700e-003</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>	<b>0.0568</b>						

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

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

Land Use	Electricity Use KWh/yr	Total CO2	CH4	N2O	CO2e
		MT/yr			
Apartments Low Rise	189818				
Day-Care Center	40640				
Enclosed Parking with Elevator	3.35704e+006				
Hotel	1.63003e+006				
Other Asphalt Surfaces	0				
Quality Restaurant	567300				
Research & Development	4.9898e+006				
Strip Mall	262095				
Strip Mall	67845.4				
Unenclosed Parking with Elevator	600799				
<b>Total</b>					

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**5.3 Energy by Land Use - Electricity**

**Mitigated**

Land Use	Electricity Use KWh/yr	Total CO2	CH4	N2O	CO2e
Apartment's Low Rise	189818				
Day-Care Center	40640				
Enclosed Parking with Elevator	3.35704e+006				
Hotel	1.63003e+006				
Other Asphalt Surfaces	0				
Quality Restaurant	567300				
Research & Development	4.9898e+006				
Strip Mall	262095				
Strip Mall	67845,4				
Unenclosed Parking with Elevator	600799				
<b>Total</b>					

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Use Electric Lawnmower

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

- Use Electric Leafblower
- Use Electric Chainsaw
- Use Low VOC Paint - Residential Interior
- Use Low VOC Paint - Residential Exterior
- Use Low VOC Paint - Non-Residential Interior
- Use Low VOC Paint - Non-Residential Exterior
- No Hearths Installed

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
	tons/yr										MT/yr					
Mitigated	3.5986	4.1800e-003	0.3664	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
Unmitigated	3.5986	4.1800e-003	0.3664	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						

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

**6.2 Area by SubCategory**

**Unmitigated**

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Architectural Coating	0.1820					0.0000	0.0000		0.0000	0.0000						
Consumer Products	3.4045					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						
Landscaping	0.0121	4.1800e-003	0.3664	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
<b>Total</b>	<b>3.5986</b>	<b>4.1800e-003</b>	<b>0.3664</b>	<b>2.0000e-005</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>						

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

**6.2 Area by SubCategory**

**Mitigated**

SubCategory	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Architectural Coating	0.1820					0.0000	0.0000		0.0000	0.0000						
Consumer Products	3.4045					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						
Landscaping	0.0121	4.1800e-003	0.3664	2.0000e-005		2.0000e-003	2.0000e-003		2.0000e-003	2.0000e-003						
<b>Total</b>	<b>3.5986</b>	<b>4.1800e-003</b>	<b>0.3664</b>	<b>2.0000e-005</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>						

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System
- Use Water Efficient Landscaping

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	.....	.....	.....	.....
Unmitigated	.....	.....	.....	.....



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

**7.2 Water by Land Use**

**Unmitigated**

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Apartments Low Rise	3.06224 / 1.93054				
Day-Care Center	-0.343117 / 0.8823				
Enclosed Parking with Elevator	0 / 0				
Hotel	3.04401 / 0.338224				
Other Asphalt Surfaces	0 / 0				
Quality Restaurant	4.55301 / 0.290617				
Research & Development	299.933 / 0				
Strip Mall	1.99996 / 1.22578				
Unenclosed Parking with Elevator	0 / 0				
<b>Total</b>					

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

**7.2 Water by Land Use**

**Mitigated**

Land Use	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
	Mgal	MT/yr			
Apartments Low Rise	2.44979 / 1.81278				
Day-Care Center	-0.274493 / 0.828479				
Enclosed Parking with Elevator	0 / 0				
Hotel	2.43521 / 0.317592				
Other Asphalt Surfaces	0 / 0				
Quailty Restaurant	3.6424 / 0.27289				
Research & Development	239.947 / 0				
Strip Mall	1.59997 / 1.15101				
Unenclosed Parking with Elevator	0 / 0				
<b>Total</b>					

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MTYr			
Mitigated				
Unmitigated				

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**8.2 Waste by Land Use**

**Unmitigated**

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
Apartments Low Rise	21.62				
Day-Care Center	10.4				
Enclosed Parking with Elevator	0				
Hotel	65.7				
Other Asphalt Surfaces	0				
Quality Restaurant	13.69				
Research & Development	46.36				
Strip Mall	28.35				
Unenclosed Parking with Elevator	0				
<b>Total</b>					

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

**8.2 Waste by Land Use**

**Mitigated**

Land Use	Waste Disposed tons	Total CO2	CH4	N2O	CO2e
		MTYr			
Apartments Low Rise	7.567				
Day-Care Center	3.64				
Enclosed Parking with Elevator	0				
Hotel	22.995				
Other Asphalt Surfaces	0				
Quality Restaurant	4.7915				
Research & Development	16.226				
Strip Mall	9.9225				
Unenclosed Parking with Elevator	0				
<b>Total</b>					

**9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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

**Fire Pumps and Emergency Generators**

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	3	1	50	2923	0.73	Diesel

**Boilers**

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

**User Defined Equipment**

Equipment Type	Number
Title 24 heating for R&D at PTE	1

**10.1 Stationary Sources**

**Unmitigated/Mitigated**

Equipment Type	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
tons/yr																
MT/yr																
Emergency Generator - Diesel (750 - 9999 HP)	0.0848	1.6088	0.9173	1.7300e-003	0.0529	0.0529	0.0529	0.0529	0.0529	0.0529						
Title 24 heating for R&D at PTE	0.9919	4.5354	15.1496	0.1082	1.3707	1.3707	1.3707	1.3707	1.3707	1.3707						
<b>Total</b>	<b>1.0767</b>	<b>6.1442</b>	<b>16.0669</b>	<b>0.1099</b>	<b>1.4236</b>	<b>1.4236</b>	<b>1.4236</b>	<b>1.4236</b>	<b>1.4236</b>	<b>1.4236</b>						

**11.0 Vegetation**