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# Appendix O

## Alternative B CalEEMod Outputs

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Annual

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

**Alexan Arcadia EIR Alternative Analysis  
Los Angeles-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Enclosed Parking with Elevator      | 551.00 | Space         | 1.24        | 220,400.00         | 0          |
| Other Non-Asphalt Surfaces          | 41.35  | 1000sqft      | 0.95        | 41,350.00          | 0          |
| Fast Food Restaurant w/o Drive Thru | 0.75   | 1000sqft      | 0.02        | 750.00             | 0          |
| Health Club                         | 17.22  | 1000sqft      | 0.00        | 17,220.00          | 0          |
| Recreational Swimming Pool          | 6.67   | 1000sqft      | 0.00        | 6,670.00           | 0          |
| Apartments Mid Rise                 | 311.00 | Dwelling Unit | 0.00        | 311,000.00         | 889        |
| Regional Shopping Center            | 15.14  | 1000sqft      | 0.35        | 15,145.00          | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2024  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 390.98                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.033 | <b>N2O Intensity (lb/MW hr)</b>  | 0.004 |

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

Project Characteristics - Alternative operational analysis only. Change live-work to commercial space.

Land Use - Lot acre = ground lvl land use = 2.95 gross site area. SF Based on prelim design study. For Alternative live-work area changed to commercial/retail.

Health Club = Fitness and Game Room and common rooms. Fast food = cafe.

Construction Phase - Building construction schedule provided by applicant.

Off-road Equipment - Default values

Off-road Equipment - Default values

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Off-road Equipment - Default values

Off-road Equipment - Default values + 1 excavator added for excavation of subterranean parking, applicant confirmed.

Off-road Equipment - Default values

Off-road Equipment - Default values

Trips and VMT - Rounded trips to even values. Grading haul trips provided by applicant includes excavation.

Demolition - Removal of 94,815 sqft of paved surface and demolition of 17,324 sqft of existing buildings

Grading - Per applicant provided information for materials, graded area default values.

Architectural Coating - No-VOC coatings will be used for the proeject pre applicant. 5 g/L assumed.

Vehicle Trips - Based on TIA. General Office Building based on TIA traffic data for Live-Work spaces.

Woodstoves - No woodstoves or wood fireplaces.

Area Coating - No-VOC paint per applicant. 5 g/L assumed.

Energy Use - Default values

Water And Wastewater - Default values.

Solid Waste - Default values.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - No-VOC paint per applicant

Energy Mitigation - Applicant provided information for onsite solar energy.

Water Mitigation -

Fleet Mix -

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 16,927.00     | 16,929.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 50,780.00     | 50,786.00 |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Residential_Exterior           | 50.00         | 5.00      |
| tblArchitecturalCoating | EF_Residential_Interior           | 50.00         | 5.00      |
| tblAreaCoating          | Area_Nonresidential_Exterior      | 16927         | 16929     |

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|                      |                              |           |           |
|----------------------|------------------------------|-----------|-----------|
| tblAreaCoating       | Area_Nonresidential_Interior | 50780     | 50786     |
| tblConstructionPhase | NumDays                      | 220.00    | 513.00    |
| tblConstructionPhase | NumDays                      | 6.00      | 15.00     |
| tblFireplaces        | FireplaceWoodMass            | 1,019.20  | 0.00      |
| tblFireplaces        | NumberWood                   | 15.55     | 0.00      |
| tblGrading           | MaterialExported             | 0.00      | 52,000.00 |
| tblGrading           | MaterialImported             | 0.00      | 520.00    |
| tblLandUse           | LandUseSquareFeet            | 15,140.00 | 15,145.00 |
| tblLandUse           | LotAcreage                   | 4.96      | 1.24      |
| tblLandUse           | LotAcreage                   | 0.40      | 0.00      |
| tblLandUse           | LotAcreage                   | 0.15      | 0.00      |
| tblLandUse           | LotAcreage                   | 8.18      | 0.00      |
| tblTripsAndVMT       | HaulingTripNumber            | 0.00      | 2,100.00  |
| tblTripsAndVMT       | VendorTripNumber             | 83.00     | 84.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 14.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 10.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 349.00    | 348.00    |
| tblTripsAndVMT       | WorkerTripNumber             | 15.00     | 16.00     |
| tblVehicleTrips      | ST_TR                        | 696.00    | 203.31    |
| tblVehicleTrips      | ST_TR                        | 20.87     | 0.00      |
| tblVehicleTrips      | ST_TR                        | 9.10      | 0.00      |
| tblVehicleTrips      | ST_TR                        | 46.12     | 52.17     |
| tblVehicleTrips      | SU_TR                        | 500.00    | 146.06    |
| tblVehicleTrips      | SU_TR                        | 26.73     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 13.60     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 21.10     | 23.87     |
| tblVehicleTrips      | WD_TR                        | 346.23    | 101.14    |
| tblVehicleTrips      | WD_TR                        | 32.93     | 0.00      |
| tblVehicleTrips      | WD_TR                        | 28.82     | 0.00      |

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|                 |                    |        |       |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | WD_TR              | 37.75  | 42.70 |
| tblWoodstoves   | NumberCatalytic    | 15.55  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 15.55  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 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**

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2022           | 0.1993        | 1.9144        | 1.7372        | 6.3200e-003        | 0.3793        | 0.0558        | 0.4351        | 0.1068         | 0.0529        | 0.1597        | 0.0000        | 589.8172        | 589.8172        | 0.0495        | 0.0512        | 606.3150        |
| 2023           | 0.3798        | 2.3983        | 3.5726        | 9.9000e-003        | 0.5737        | 0.0854        | 0.6591        | 0.1541         | 0.0817        | 0.2357        | 0.0000        | 894.2052        | 894.2052        | 0.0699        | 0.0438        | 908.9977        |
| 2024           | 0.3661        | 1.4525        | 2.2021        | 6.1400e-003        | 0.3578        | 0.0487        | 0.4065        | 0.0961         | 0.0465        | 0.1426        | 0.0000        | 553.9985        | 553.9985        | 0.0446        | 0.0263        | 562.9489        |
| <b>Maximum</b> | <b>0.3798</b> | <b>2.3983</b> | <b>3.5726</b> | <b>9.9000e-003</b> | <b>0.5737</b> | <b>0.0854</b> | <b>0.6591</b> | <b>0.1541</b>  | <b>0.0817</b> | <b>0.2357</b> | <b>0.0000</b> | <b>894.2052</b> | <b>894.2052</b> | <b>0.0699</b> | <b>0.0512</b> | <b>908.9977</b> |

**Mitigated Construction**

|                | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Year           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| 2022           | 0.1993        | 1.9144        | 1.7371        | 6.3200e-003        | 0.3183        | 0.0558        | 0.3741        | 0.0879         | 0.0529        | 0.1408        | 0.0000        | 589.8170        | 589.8170        | 0.0495        | 0.0512        | 606.3148        |
| 2023           | 0.3798        | 2.3983        | 3.5726        | 9.9000e-003        | 0.5737        | 0.0854        | 0.6591        | 0.1541         | 0.0817        | 0.2357        | 0.0000        | 894.2048        | 894.2048        | 0.0699        | 0.0438        | 908.9974        |
| 2024           | 0.3661        | 1.4525        | 2.2021        | 6.1400e-003        | 0.3578        | 0.0487        | 0.4065        | 0.0961         | 0.0465        | 0.1426        | 0.0000        | 553.9983        | 553.9983        | 0.0446        | 0.0263        | 562.9486        |
| <b>Maximum</b> | <b>0.3798</b> | <b>2.3983</b> | <b>3.5726</b> | <b>9.9000e-003</b> | <b>0.5737</b> | <b>0.0854</b> | <b>0.6591</b> | <b>0.1541</b>  | <b>0.0817</b> | <b>0.2357</b> | <b>0.0000</b> | <b>894.2048</b> | <b>894.2048</b> | <b>0.0699</b> | <b>0.0512</b> | <b>908.9974</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 | 4.66          | 0.00         | 4.07       | 5.29           | 0.00          | 3.51        | 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       | 7-1-2022   | 9-30-2022  | 1.2975                                       | 1.2975                                     |
| 2       | 10-1-2022  | 12-31-2022 | 0.7853                                       | 0.7853                                     |
| 3       | 1-1-2023   | 3-31-2023  | 0.6887                                       | 0.6887                                     |
| 4       | 4-1-2023   | 6-30-2023  | 0.6855                                       | 0.6855                                     |
| 5       | 7-1-2023   | 9-30-2023  | 0.6930                                       | 0.6930                                     |
| 6       | 10-1-2023  | 12-31-2023 | 0.7040                                       | 0.7040                                     |
| 7       | 1-1-2024   | 3-31-2024  | 0.6612                                       | 0.6612                                     |
| 8       | 4-1-2024   | 6-30-2024  | 0.7172                                       | 0.7172                                     |
| 9       | 7-1-2024   | 9-30-2024  | 0.4291                                       | 0.4291                                     |
|         |            | Highest    | 1.2975                                       | 1.2975                                     |

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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**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | tons/yr       |               |                |               |               |               |               |                |               |               | MT/yr          |                   |                   |               |               |                   |
| Area         | 1.4832        | 0.0918        | 3.2373         | 5.2000e-004   |               | 0.0222        | 0.0222        |                | 0.0222        | 0.0222        | 0.0000         | 68.7349           | 68.7349           | 6.2800e-003   | 1.1600e-003   | 69.2388           |
| Energy       | 0.0246        | 0.2121        | 0.1005         | 1.3400e-003   |               | 0.0170        | 0.0170        |                | 0.0170        | 0.0170        | 0.0000         | 742.8619          | 742.8619          | 0.0468        | 9.5800e-003   | 746.8853          |
| Mobile       | 1.1536        | 1.2857        | 11.6218        | 0.0250        | 2.6360        | 0.0184        | 2.6544        | 0.7033         | 0.0171        | 0.7203        | 0.0000         | 2,308.9243        | 2,308.9243        | 0.1630        | 0.1024        | 2,343.5195        |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 61.6626        | 0.0000            | 61.6626           | 3.6442        | 0.0000        | 152.7664          |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 7.3048         | 81.4283           | 88.7331           | 0.7571        | 0.0186        | 113.1891          |
| <b>Total</b> | <b>2.6614</b> | <b>1.5896</b> | <b>14.9596</b> | <b>0.0268</b> | <b>2.6360</b> | <b>0.0577</b> | <b>2.6937</b> | <b>0.7033</b>  | <b>0.0563</b> | <b>0.7596</b> | <b>68.9673</b> | <b>3,201.9495</b> | <b>3,270.9168</b> | <b>4.6174</b> | <b>0.1317</b> | <b>3,425.5991</b> |



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**2.2 Overall Operational**

**Mitigated Operational**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2       | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | tons/yr       |               |                |               |               |               |               |                |               |               | MT/yr          |                   |                   |               |               |                   |
| Area         | 1.4832        | 0.0918        | 3.2373         | 5.2000e-004   |               | 0.0222        | 0.0222        |                | 0.0222        | 0.0222        | 0.0000         | 68.7349           | 68.7349           | 6.2800e-003   | 1.1600e-003   | 69.2388           |
| Energy       | 0.0246        | 0.2121        | 0.1005         | 1.3400e-003   |               | 0.0170        | 0.0170        |                | 0.0170        | 0.0170        | 0.0000         | 742.8441          | 742.8441          | 0.0468        | 9.5800e-003   | 746.8675          |
| Mobile       | 1.0925        | 1.1839        | 10.6777        | 0.0225        | 2.3724        | 0.0167        | 2.3891        | 0.6329         | 0.0155        | 0.6485        | 0.0000         | 2,083.5268        | 2,083.5268        | 0.1512        | 0.0944        | 2,115.4303        |
| Waste        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 61.6626        | 0.0000            | 61.6626           | 3.6442        | 0.0000        | 152.7664          |
| Water        |               |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 7.3048         | 79.7046           | 87.0093           | 0.7570        | 0.0185        | 111.4564          |
| <b>Total</b> | <b>2.6004</b> | <b>1.4878</b> | <b>14.0155</b> | <b>0.0244</b> | <b>2.3724</b> | <b>0.0560</b> | <b>2.4284</b> | <b>0.6329</b>  | <b>0.0548</b> | <b>0.6877</b> | <b>68.9673</b> | <b>2,974.8104</b> | <b>3,043.7777</b> | <b>4.6055</b> | <b>0.1236</b> | <b>3,195.7594</b> |

|                          | ROG         | NOx         | CO          | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total  | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2    | NBio-CO2    | Total CO2   | CH4         | N2O         | CO2e        |
|--------------------------|-------------|-------------|-------------|-------------|---------------|--------------|-------------|----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Percent Reduction</b> | <b>2.29</b> | <b>6.40</b> | <b>6.31</b> | <b>9.10</b> | <b>10.00</b>  | <b>2.91</b>  | <b>9.85</b> | <b>10.00</b>   | <b>2.77</b>   | <b>9.46</b> | <b>0.00</b> | <b>7.09</b> | <b>6.94</b> | <b>0.26</b> | <b>6.12</b> | <b>6.71</b> |

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name       | Phase Type       | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------|------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition       | Demolition       | 7/1/2022   | 7/28/2022 | 5             | 20       |                   |
| 2            | Site Preparation | Site Preparation | 7/29/2022  | 8/2/2022  | 5             | 3        |                   |
| 3            | Grading          | Grading          | 8/3/2022   | 8/23/2022 | 5             | 15       |                   |

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|   |                       |                       |           |           |   |     |
|---|-----------------------|-----------------------|-----------|-----------|---|-----|
| 4 | Building Construction | Building Construction | 8/24/2022 | 8/11/2024 | 5 | 513 |
| 5 | Paving                | Paving                | 6/15/2024 | 6/28/2024 | 5 | 10  |
| 6 | Architectural Coating | Architectural Coating | 6/29/2024 | 7/12/2024 | 5 | 10  |

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 15**

**Acres of Paving: 2.19**

**Residential Indoor: 629,775; Residential Outdoor: 209,925; Non-Residential Indoor: 50,786; Non-Residential Outdoor: 16,929; Striped Parking Area: 15,705 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name            | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition            | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Demolition            | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Demolition            | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Site Preparation      | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Site Preparation      | Scrapers                  | 1      | 8.00        | 367         | 0.48        |
| Site Preparation      | Tractors/Loaders/Backhoes | 1      | 7.00        | 97          | 0.37        |
| Grading               | Excavators                | 1      | 8.00        | 158         | 0.38        |
| Grading               | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading               | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Grading               | Tractors/Loaders/Backhoes | 2      | 7.00        | 97          | 0.37        |
| Building Construction | Cranes                    | 1      | 8.00        | 231         | 0.29        |
| Building Construction | Forklifts                 | 2      | 7.00        | 89          | 0.20        |
| Building Construction | Generator Sets            | 1      | 8.00        | 84          | 0.74        |
| Building Construction | Tractors/Loaders/Backhoes | 1      | 6.00        | 97          | 0.37        |
| Building Construction | Welders                   | 3      | 8.00        | 46          | 0.45        |
| Paving                | Cement and Mortar Mixers  | 1      | 8.00        | 9           | 0.56        |
| Paving                | Pavers                    | 1      | 8.00        | 130         | 0.42        |

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|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Paving                | Paving Equipment          | 1 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Architectural Coating | Air Compressors           | 1 | 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 |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 14.00              | 0.00               | 485.00              | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation      | 3                       | 8.00               | 0.00               | 65.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 5                       | 10.00              | 0.00               | 6,500.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 348.00             | 84.00              | 2,100.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 16.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 70.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Annual

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

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                    |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0525        | 0.0000             | 0.0525        | 7.9500e-003        | 0.0000             | 7.9500e-003   | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0169        | 0.1662        | 0.1396        | 2.4000e-004        |               | 8.3800e-003        | 8.3800e-003   |                    | 7.8300e-003        | 7.8300e-003   | 0.0000        | 21.0777        | 21.0777        | 5.3700e-003        | 0.0000        | 21.2120        |
| <b>Total</b>  | <b>0.0169</b> | <b>0.1662</b> | <b>0.1396</b> | <b>2.4000e-004</b> | <b>0.0525</b> | <b>8.3800e-003</b> | <b>0.0609</b> | <b>7.9500e-003</b> | <b>7.8300e-003</b> | <b>0.0158</b> | <b>0.0000</b> | <b>21.0777</b> | <b>21.0777</b> | <b>5.3700e-003</b> | <b>0.0000</b> | <b>21.2120</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 1.1200e-003        | 0.0429        | 9.5600e-003   | 1.5000e-004        | 4.1700e-003        | 3.0000e-004        | 4.4800e-003        | 1.1500e-003        | 2.9000e-004        | 1.4400e-003        | 0.0000        | 14.9784        | 14.9784        | 7.9000e-004        | 2.3800e-003        | 15.7065        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 4.8000e-004        | 4.0000e-004   | 5.1900e-003   | 1.0000e-005        | 1.5300e-003        | 1.0000e-005        | 1.5400e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.2617         | 1.2617         | 4.0000e-005        | 3.0000e-005        | 1.2729         |
| <b>Total</b> | <b>1.6000e-003</b> | <b>0.0433</b> | <b>0.0148</b> | <b>1.6000e-004</b> | <b>5.7000e-003</b> | <b>3.1000e-004</b> | <b>6.0200e-003</b> | <b>1.5600e-003</b> | <b>3.0000e-004</b> | <b>1.8600e-003</b> | <b>0.0000</b> | <b>16.2401</b> | <b>16.2401</b> | <b>8.3000e-004</b> | <b>2.4100e-003</b> | <b>16.9794</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 Demolition - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                    |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0236        | 0.0000             | 0.0236        | 3.5800e-003        | 0.0000             | 3.5800e-003   | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0169        | 0.1662        | 0.1396        | 2.4000e-004        |               | 8.3800e-003        | 8.3800e-003   |                    | 7.8300e-003        | 7.8300e-003   | 0.0000        | 21.0777        | 21.0777        | 5.3700e-003        | 0.0000        | 21.2119        |
| <b>Total</b>  | <b>0.0169</b> | <b>0.1662</b> | <b>0.1396</b> | <b>2.4000e-004</b> | <b>0.0236</b> | <b>8.3800e-003</b> | <b>0.0320</b> | <b>3.5800e-003</b> | <b>7.8300e-003</b> | <b>0.0114</b> | <b>0.0000</b> | <b>21.0777</b> | <b>21.0777</b> | <b>5.3700e-003</b> | <b>0.0000</b> | <b>21.2119</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 1.1200e-003        | 0.0429        | 9.5600e-003   | 1.5000e-004        | 4.1700e-003        | 3.0000e-004        | 4.4800e-003        | 1.1500e-003        | 2.9000e-004        | 1.4400e-003        | 0.0000        | 14.9784        | 14.9784        | 7.9000e-004        | 2.3800e-003        | 15.7065        |
| Vendor       | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Worker       | 4.8000e-004        | 4.0000e-004   | 5.1900e-003   | 1.0000e-005        | 1.5300e-003        | 1.0000e-005        | 1.5400e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.2617         | 1.2617         | 4.0000e-005        | 3.0000e-005        | 1.2729         |
| <b>Total</b> | <b>1.6000e-003</b> | <b>0.0433</b> | <b>0.0148</b> | <b>1.6000e-004</b> | <b>5.7000e-003</b> | <b>3.1000e-004</b> | <b>6.0200e-003</b> | <b>1.5600e-003</b> | <b>3.0000e-004</b> | <b>1.8600e-003</b> | <b>0.0000</b> | <b>16.2401</b> | <b>16.2401</b> | <b>8.3000e-004</b> | <b>2.4100e-003</b> | <b>16.9794</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 Site Preparation - 2022**

**Unmitigated Construction On-Site**

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 2.4200e-003        | 0.0000             | 2.4200e-003        | 2.6000e-004        | 0.0000             | 2.6000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 2.0700e-003        | 0.0235        | 0.0151        | 4.0000e-005        |                    | 8.9000e-004        | 8.9000e-004        |                    | 8.2000e-004        | 8.2000e-004        | 0.0000        | 3.2321        | 3.2321        | 1.0500e-003        | 0.0000        | 3.2582        |
| <b>Total</b>  | <b>2.0700e-003</b> | <b>0.0235</b> | <b>0.0151</b> | <b>4.0000e-005</b> | <b>2.4200e-003</b> | <b>8.9000e-004</b> | <b>3.3100e-003</b> | <b>2.6000e-004</b> | <b>8.2000e-004</b> | <b>1.0800e-003</b> | <b>0.0000</b> | <b>3.2321</b> | <b>3.2321</b> | <b>1.0500e-003</b> | <b>0.0000</b> | <b>3.2582</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 1.5000e-004        | 5.7500e-003        | 1.2800e-003        | 2.0000e-005        | 5.6000e-004        | 4.0000e-005        | 6.0000e-004        | 1.5000e-004        | 4.0000e-005        | 1.9000e-004        | 0.0000        | 2.0074        | 2.0074        | 1.1000e-004        | 3.2000e-004        | 2.1050        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 4.0000e-005        | 3.0000e-005        | 4.4000e-004        | 0.0000             | 1.3000e-004        | 0.0000             | 1.3000e-004        | 3.0000e-005        | 0.0000             | 4.0000e-005        | 0.0000        | 0.1082        | 0.1082        | 0.0000             | 0.0000             | 0.1091        |
| <b>Total</b> | <b>1.9000e-004</b> | <b>5.7800e-003</b> | <b>1.7200e-003</b> | <b>2.0000e-005</b> | <b>6.9000e-004</b> | <b>4.0000e-005</b> | <b>7.3000e-004</b> | <b>1.8000e-004</b> | <b>4.0000e-005</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>2.1156</b> | <b>2.1156</b> | <b>1.1000e-004</b> | <b>3.2000e-004</b> | <b>2.2141</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 Site Preparation - 2022**

**Mitigated Construction On-Site**

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 1.0900e-003        | 0.0000             | 1.0900e-003        | 1.2000e-004        | 0.0000             | 1.2000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 2.0700e-003        | 0.0235        | 0.0151        | 4.0000e-005        |                    | 8.9000e-004        | 8.9000e-004        |                    | 8.2000e-004        | 8.2000e-004        | 0.0000        | 3.2321        | 3.2321        | 1.0500e-003        | 0.0000        | 3.2582        |
| <b>Total</b>  | <b>2.0700e-003</b> | <b>0.0235</b> | <b>0.0151</b> | <b>4.0000e-005</b> | <b>1.0900e-003</b> | <b>8.9000e-004</b> | <b>1.9800e-003</b> | <b>1.2000e-004</b> | <b>8.2000e-004</b> | <b>9.4000e-004</b> | <b>0.0000</b> | <b>3.2321</b> | <b>3.2321</b> | <b>1.0500e-003</b> | <b>0.0000</b> | <b>3.2582</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 1.5000e-004        | 5.7500e-003        | 1.2800e-003        | 2.0000e-005        | 5.6000e-004        | 4.0000e-005        | 6.0000e-004        | 1.5000e-004        | 4.0000e-005        | 1.9000e-004        | 0.0000        | 2.0074        | 2.0074        | 1.1000e-004        | 3.2000e-004        | 2.1050        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 4.0000e-005        | 3.0000e-005        | 4.4000e-004        | 0.0000             | 1.3000e-004        | 0.0000             | 1.3000e-004        | 3.0000e-005        | 0.0000             | 4.0000e-005        | 0.0000        | 0.1082        | 0.1082        | 0.0000             | 0.0000             | 0.1091        |
| <b>Total</b> | <b>1.9000e-004</b> | <b>5.7800e-003</b> | <b>1.7200e-003</b> | <b>2.0000e-005</b> | <b>6.9000e-004</b> | <b>4.0000e-005</b> | <b>7.3000e-004</b> | <b>1.8000e-004</b> | <b>4.0000e-005</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>2.1156</b> | <b>2.1156</b> | <b>1.1000e-004</b> | <b>3.2000e-004</b> | <b>2.2141</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 Grading - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0561        | 0.0000             | 0.0561        | 0.0261         | 0.0000             | 0.0261        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0131        | 0.1407        | 0.0936        | 1.9000e-004        |               | 6.2100e-003        | 6.2100e-003   |                | 5.7100e-003        | 5.7100e-003   | 0.0000        | 16.9791        | 16.9791        | 5.4900e-003        | 0.0000        | 17.1164        |
| <b>Total</b>  | <b>0.0131</b> | <b>0.1407</b> | <b>0.0936</b> | <b>1.9000e-004</b> | <b>0.0561</b> | <b>6.2100e-003</b> | <b>0.0623</b> | <b>0.0261</b>  | <b>5.7100e-003</b> | <b>0.0318</b> | <b>0.0000</b> | <b>16.9791</b> | <b>16.9791</b> | <b>5.4900e-003</b> | <b>0.0000</b> | <b>17.1164</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0150        | 0.5749        | 0.1282        | 2.0200e-003        | 0.0559        | 4.0600e-003        | 0.0600        | 0.0154         | 3.8800e-003        | 0.0192        | 0.0000        | 200.7412        | 200.7412        | 0.0107        | 0.0319        | 210.4993        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 2.6000e-004   | 2.1000e-004   | 2.7800e-003   | 1.0000e-005        | 8.2000e-004   | 1.0000e-005        | 8.3000e-004   | 2.2000e-004    | 0.0000             | 2.2000e-004   | 0.0000        | 0.6759          | 0.6759          | 2.0000e-005   | 2.0000e-005   | 0.6819          |
| <b>Total</b> | <b>0.0153</b> | <b>0.5751</b> | <b>0.1310</b> | <b>2.0300e-003</b> | <b>0.0567</b> | <b>4.0700e-003</b> | <b>0.0608</b> | <b>0.0156</b>  | <b>3.8800e-003</b> | <b>0.0195</b> | <b>0.0000</b> | <b>201.4171</b> | <b>201.4171</b> | <b>0.0107</b> | <b>0.0319</b> | <b>211.1812</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 Grading - 2022**

**Mitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0252        | 0.0000             | 0.0252        | 0.0118         | 0.0000             | 0.0118        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0131        | 0.1407        | 0.0936        | 1.9000e-004        |               | 6.2100e-003        | 6.2100e-003   |                | 5.7100e-003        | 5.7100e-003   | 0.0000        | 16.9791        | 16.9791        | 5.4900e-003        | 0.0000        | 17.1164        |
| <b>Total</b>  | <b>0.0131</b> | <b>0.1407</b> | <b>0.0936</b> | <b>1.9000e-004</b> | <b>0.0252</b> | <b>6.2100e-003</b> | <b>0.0314</b> | <b>0.0118</b>  | <b>5.7100e-003</b> | <b>0.0175</b> | <b>0.0000</b> | <b>16.9791</b> | <b>16.9791</b> | <b>5.4900e-003</b> | <b>0.0000</b> | <b>17.1164</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 0.0150        | 0.5749        | 0.1282        | 2.0200e-003        | 0.0559        | 4.0600e-003        | 0.0600        | 0.0154         | 3.8800e-003        | 0.0192        | 0.0000        | 200.7412        | 200.7412        | 0.0107        | 0.0319        | 210.4993        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 2.6000e-004   | 2.1000e-004   | 2.7800e-003   | 1.0000e-005        | 8.2000e-004   | 1.0000e-005        | 8.3000e-004   | 2.2000e-004    | 0.0000             | 2.2000e-004   | 0.0000        | 0.6759          | 0.6759          | 2.0000e-005   | 2.0000e-005   | 0.6819          |
| <b>Total</b> | <b>0.0153</b> | <b>0.5751</b> | <b>0.1310</b> | <b>2.0300e-003</b> | <b>0.0567</b> | <b>4.0700e-003</b> | <b>0.0608</b> | <b>0.0156</b>  | <b>3.8800e-003</b> | <b>0.0195</b> | <b>0.0000</b> | <b>201.4171</b> | <b>201.4171</b> | <b>0.0107</b> | <b>0.0319</b> | <b>211.1812</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 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0863        | 0.6791        | 0.6674        | 1.1600e-003        |               | 0.0327        | 0.0327        |                | 0.0313        | 0.0313        | 0.0000        | 96.5713        | 96.5713        | 0.0186        | 0.0000        | 97.0370        |
| <b>Total</b> | <b>0.0863</b> | <b>0.6791</b> | <b>0.6674</b> | <b>1.1600e-003</b> |               | <b>0.0327</b> | <b>0.0327</b> |                | <b>0.0313</b> | <b>0.0313</b> | <b>0.0000</b> | <b>96.5713</b> | <b>96.5713</b> | <b>0.0186</b> | <b>0.0000</b> | <b>97.0370</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 8.8000e-004   | 0.0337        | 7.5100e-003   | 1.2000e-004        | 3.2700e-003   | 2.4000e-004        | 3.5100e-003   | 9.0000e-004    | 2.3000e-004        | 1.1300e-003   | 0.0000        | 11.7573         | 11.7573         | 6.2000e-004        | 1.8700e-003   | 12.3288         |
| Vendor       | 7.6200e-003   | 0.2009        | 0.0666        | 7.7000e-004        | 0.0246        | 1.8300e-003        | 0.0264        | 7.1100e-003    | 1.7500e-003        | 8.8500e-003   | 0.0000        | 74.5882         | 74.5882         | 2.4900e-003        | 0.0108        | 77.8567         |
| Worker       | 0.0554        | 0.0462        | 0.5999        | 1.5900e-003        | 0.1773        | 1.1600e-003        | 0.1785        | 0.0471         | 1.0700e-003        | 0.0482        | 0.0000        | 145.8388        | 145.8388        | 4.1900e-003        | 3.9900e-003   | 147.1313        |
| <b>Total</b> | <b>0.0639</b> | <b>0.2807</b> | <b>0.6741</b> | <b>2.4800e-003</b> | <b>0.2052</b> | <b>3.2300e-003</b> | <b>0.2084</b> | <b>0.0551</b>  | <b>3.0500e-003</b> | <b>0.0581</b> | <b>0.0000</b> | <b>232.1843</b> | <b>232.1843</b> | <b>7.3000e-003</b> | <b>0.0166</b> | <b>237.3168</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 Building Construction - 2022**

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4           | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|---------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |               |               |                |
| Off-Road     | 0.0863        | 0.6791        | 0.6674        | 1.1600e-003        |               | 0.0327        | 0.0327        |                | 0.0313        | 0.0313        | 0.0000        | 96.5711        | 96.5711        | 0.0186        | 0.0000        | 97.0369        |
| <b>Total</b> | <b>0.0863</b> | <b>0.6791</b> | <b>0.6674</b> | <b>1.1600e-003</b> |               | <b>0.0327</b> | <b>0.0327</b> |                | <b>0.0313</b> | <b>0.0313</b> | <b>0.0000</b> | <b>96.5711</b> | <b>96.5711</b> | <b>0.0186</b> | <b>0.0000</b> | <b>97.0369</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |                    |               |                 |
| Hauling      | 8.8000e-004   | 0.0337        | 7.5100e-003   | 1.2000e-004        | 3.2700e-003   | 2.4000e-004        | 3.5100e-003   | 9.0000e-004    | 2.3000e-004        | 1.1300e-003   | 0.0000        | 11.7573         | 11.7573         | 6.2000e-004        | 1.8700e-003   | 12.3288         |
| Vendor       | 7.6200e-003   | 0.2009        | 0.0666        | 7.7000e-004        | 0.0246        | 1.8300e-003        | 0.0264        | 7.1100e-003    | 1.7500e-003        | 8.8500e-003   | 0.0000        | 74.5882         | 74.5882         | 2.4900e-003        | 0.0108        | 77.8567         |
| Worker       | 0.0554        | 0.0462        | 0.5999        | 1.5900e-003        | 0.1773        | 1.1600e-003        | 0.1785        | 0.0471         | 1.0700e-003        | 0.0482        | 0.0000        | 145.8388        | 145.8388        | 4.1900e-003        | 3.9900e-003   | 147.1313        |
| <b>Total</b> | <b>0.0639</b> | <b>0.2807</b> | <b>0.6741</b> | <b>2.4800e-003</b> | <b>0.2052</b> | <b>3.2300e-003</b> | <b>0.2084</b> | <b>0.0551</b>  | <b>3.0500e-003</b> | <b>0.0581</b> | <b>0.0000</b> | <b>232.1843</b> | <b>232.1843</b> | <b>7.3000e-003</b> | <b>0.0166</b> | <b>237.3168</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 Building Construction - 2023**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.2228        | 1.7711        | 1.8479        | 3.2500e-003        |               | 0.0798        | 0.0798        |                | 0.0764        | 0.0764        | 0.0000        | 270.0127        | 270.0127        | 0.0511        | 0.0000        | 271.2893        |
| <b>Total</b> | <b>0.2228</b> | <b>1.7711</b> | <b>1.8479</b> | <b>3.2500e-003</b> |               | <b>0.0798</b> | <b>0.0798</b> |                | <b>0.0764</b> | <b>0.0764</b> | <b>0.0000</b> | <b>270.0127</b> | <b>270.0127</b> | <b>0.0511</b> | <b>0.0000</b> | <b>271.2893</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 1.1200e-003   | 0.0732        | 0.0186        | 3.1000e-004        | 9.1600e-003   | 4.4000e-004        | 9.5900e-003   | 2.5100e-003    | 4.2000e-004        | 2.9300e-003   | 0.0000        | 31.0395         | 31.0395         | 1.7100e-003   | 4.9300e-003   | 32.5511         |
| Vendor       | 0.0123        | 0.4401        | 0.1647        | 2.0300e-003        | 0.0688        | 2.1100e-003        | 0.0709        | 0.0199         | 2.0200e-003        | 0.0219        | 0.0000        | 198.5499        | 198.5499        | 6.6400e-003   | 0.0286        | 207.2309        |
| Worker       | 0.1435        | 0.1140        | 1.5414        | 4.3000e-003        | 0.4957        | 3.0400e-003        | 0.4988        | 0.1317         | 2.8000e-003        | 0.1345        | 0.0000        | 394.6031        | 394.6031        | 0.0105        | 0.0103        | 397.9265        |
| <b>Total</b> | <b>0.1570</b> | <b>0.6272</b> | <b>1.7247</b> | <b>6.6400e-003</b> | <b>0.5737</b> | <b>5.5900e-003</b> | <b>0.5793</b> | <b>0.1540</b>  | <b>5.2400e-003</b> | <b>0.1593</b> | <b>0.0000</b> | <b>624.1925</b> | <b>624.1925</b> | <b>0.0189</b> | <b>0.0438</b> | <b>637.7084</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 Building Construction - 2023**

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.2228        | 1.7711        | 1.8479        | 3.2500e-003        |               | 0.0798        | 0.0798        |                | 0.0764        | 0.0764        | 0.0000        | 270.0124        | 270.0124        | 0.0511        | 0.0000        | 271.2889        |
| <b>Total</b> | <b>0.2228</b> | <b>1.7711</b> | <b>1.8479</b> | <b>3.2500e-003</b> |               | <b>0.0798</b> | <b>0.0798</b> |                | <b>0.0764</b> | <b>0.0764</b> | <b>0.0000</b> | <b>270.0124</b> | <b>270.0124</b> | <b>0.0511</b> | <b>0.0000</b> | <b>271.2889</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 1.1200e-003   | 0.0732        | 0.0186        | 3.1000e-004        | 9.1600e-003   | 4.4000e-004        | 9.5900e-003   | 2.5100e-003    | 4.2000e-004        | 2.9300e-003   | 0.0000        | 31.0395         | 31.0395         | 1.7100e-003   | 4.9300e-003   | 32.5511         |
| Vendor       | 0.0123        | 0.4401        | 0.1647        | 2.0300e-003        | 0.0688        | 2.1100e-003        | 0.0709        | 0.0199         | 2.0200e-003        | 0.0219        | 0.0000        | 198.5499        | 198.5499        | 6.6400e-003   | 0.0286        | 207.2309        |
| Worker       | 0.1435        | 0.1140        | 1.5414        | 4.3000e-003        | 0.4957        | 3.0400e-003        | 0.4988        | 0.1317         | 2.8000e-003        | 0.1345        | 0.0000        | 394.6031        | 394.6031        | 0.0105        | 0.0103        | 397.9265        |
| <b>Total</b> | <b>0.1570</b> | <b>0.6272</b> | <b>1.7247</b> | <b>6.6400e-003</b> | <b>0.5737</b> | <b>5.5900e-003</b> | <b>0.5793</b> | <b>0.1540</b>  | <b>5.2400e-003</b> | <b>0.1593</b> | <b>0.0000</b> | <b>624.1925</b> | <b>624.1925</b> | <b>0.0189</b> | <b>0.0438</b> | <b>637.7084</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 Building Construction - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1278        | 1.0259        | 1.1280        | 2.0000e-003        |               | 0.0430        | 0.0430        |                | 0.0412        | 0.0412        | 0.0000        | 166.1711        | 166.1711        | 0.0310        | 0.0000        | 166.9449        |
| <b>Total</b> | <b>0.1278</b> | <b>1.0259</b> | <b>1.1280</b> | <b>2.0000e-003</b> |               | <b>0.0430</b> | <b>0.0430</b> |                | <b>0.0412</b> | <b>0.0412</b> | <b>0.0000</b> | <b>166.1711</b> | <b>166.1711</b> | <b>0.0310</b> | <b>0.0000</b> | <b>166.9449</b> |

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 6.9000e-004   | 0.0452        | 0.0117        | 1.9000e-004        | 5.6300e-003   | 2.7000e-004        | 5.9100e-003   | 1.5500e-003    | 2.6000e-004        | 1.8100e-003   | 0.0000        | 18.8308         | 18.8308         | 1.0600e-003   | 2.9900e-003   | 19.7489         |
| Vendor       | 7.3500e-003   | 0.2714        | 0.0992        | 1.2300e-003        | 0.0424        | 1.3100e-003        | 0.0437        | 0.0122         | 1.2500e-003        | 0.0135        | 0.0000        | 120.3514        | 120.3514        | 4.1000e-003   | 0.0173        | 125.6203        |
| Worker       | 0.0824        | 0.0626        | 0.8820        | 2.5700e-003        | 0.3051        | 1.7900e-003        | 0.3069        | 0.0810         | 1.6500e-003        | 0.0827        | 0.0000        | 235.9666        | 235.9666        | 5.8500e-003   | 5.8800e-003   | 237.8637        |
| <b>Total</b> | <b>0.0904</b> | <b>0.3791</b> | <b>0.9929</b> | <b>3.9900e-003</b> | <b>0.3531</b> | <b>3.3700e-003</b> | <b>0.3564</b> | <b>0.0948</b>  | <b>3.1600e-003</b> | <b>0.0980</b> | <b>0.0000</b> | <b>375.1488</b> | <b>375.1488</b> | <b>0.0110</b> | <b>0.0262</b> | <b>383.2328</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 Building Construction - 2024**

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |               |               |                 |
| Off-Road     | 0.1278        | 1.0259        | 1.1280        | 2.0000e-003        |               | 0.0430        | 0.0430        |                | 0.0412        | 0.0412        | 0.0000        | 166.1709        | 166.1709        | 0.0310        | 0.0000        | 166.9447        |
| <b>Total</b> | <b>0.1278</b> | <b>1.0259</b> | <b>1.1280</b> | <b>2.0000e-003</b> |               | <b>0.0430</b> | <b>0.0430</b> |                | <b>0.0412</b> | <b>0.0412</b> | <b>0.0000</b> | <b>166.1709</b> | <b>166.1709</b> | <b>0.0310</b> | <b>0.0000</b> | <b>166.9447</b> |

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                 |                 |               |               |                 |
| Hauling      | 6.9000e-004   | 0.0452        | 0.0117        | 1.9000e-004        | 5.6300e-003   | 2.7000e-004        | 5.9100e-003   | 1.5500e-003    | 2.6000e-004        | 1.8100e-003   | 0.0000        | 18.8308         | 18.8308         | 1.0600e-003   | 2.9900e-003   | 19.7489         |
| Vendor       | 7.3500e-003   | 0.2714        | 0.0992        | 1.2300e-003        | 0.0424        | 1.3100e-003        | 0.0437        | 0.0122         | 1.2500e-003        | 0.0135        | 0.0000        | 120.3514        | 120.3514        | 4.1000e-003   | 0.0173        | 125.6203        |
| Worker       | 0.0824        | 0.0626        | 0.8820        | 2.5700e-003        | 0.3051        | 1.7900e-003        | 0.3069        | 0.0810         | 1.6500e-003        | 0.0827        | 0.0000        | 235.9666        | 235.9666        | 5.8500e-003   | 5.8800e-003   | 237.8637        |
| <b>Total</b> | <b>0.0904</b> | <b>0.3791</b> | <b>0.9929</b> | <b>3.9900e-003</b> | <b>0.3531</b> | <b>3.3700e-003</b> | <b>0.3564</b> | <b>0.0948</b>  | <b>3.1600e-003</b> | <b>0.0980</b> | <b>0.0000</b> | <b>375.1488</b> | <b>375.1488</b> | <b>0.0110</b> | <b>0.0262</b> | <b>383.2328</b> |

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

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 4.2100e-003        | 0.0405        | 0.0585        | 9.0000e-005        |               | 1.9800e-003        | 1.9800e-003        |                | 1.8300e-003        | 1.8300e-003        | 0.0000        | 7.7574        | 7.7574        | 2.4600e-003        | 0.0000        | 7.8188        |
| Paving       | 0.0000             |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| <b>Total</b> | <b>4.2100e-003</b> | <b>0.0405</b> | <b>0.0585</b> | <b>9.0000e-005</b> |               | <b>1.9800e-003</b> | <b>1.9800e-003</b> |                | <b>1.8300e-003</b> | <b>1.8300e-003</b> | <b>0.0000</b> | <b>7.7574</b> | <b>7.7574</b> | <b>2.4600e-003</b> | <b>0.0000</b> | <b>7.8188</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |               |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 2.4000e-004        | 1.8000e-004        | 2.5300e-003        | 1.0000e-005        | 8.8000e-004        | 1.0000e-005        | 8.8000e-004        | 2.3000e-004        | 0.0000        | 2.4000e-004        | 0.0000        | 0.6781        | 0.6781        | 2.0000e-005        | 2.0000e-005        | 0.6835        |
| <b>Total</b> | <b>2.4000e-004</b> | <b>1.8000e-004</b> | <b>2.5300e-003</b> | <b>1.0000e-005</b> | <b>8.8000e-004</b> | <b>1.0000e-005</b> | <b>8.8000e-004</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>2.4000e-004</b> | <b>0.0000</b> | <b>0.6781</b> | <b>0.6781</b> | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.6835</b> |



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

**3.6 Paving - 2024**

**Mitigated Construction On-Site**

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 4.2100e-003        | 0.0405        | 0.0585        | 9.0000e-005        |               | 1.9800e-003        | 1.9800e-003        |                | 1.8300e-003        | 1.8300e-003        | 0.0000        | 7.7573        | 7.7573        | 2.4600e-003        | 0.0000        | 7.8188        |
| Paving       | 0.0000             |               |               |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| <b>Total</b> | <b>4.2100e-003</b> | <b>0.0405</b> | <b>0.0585</b> | <b>9.0000e-005</b> |               | <b>1.9800e-003</b> | <b>1.9800e-003</b> |                | <b>1.8300e-003</b> | <b>1.8300e-003</b> | <b>0.0000</b> | <b>7.7573</b> | <b>7.7573</b> | <b>2.4600e-003</b> | <b>0.0000</b> | <b>7.8188</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |               |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 2.4000e-004        | 1.8000e-004        | 2.5300e-003        | 1.0000e-005        | 8.8000e-004        | 1.0000e-005        | 8.8000e-004        | 2.3000e-004        | 0.0000        | 2.4000e-004        | 0.0000        | 0.6781        | 0.6781        | 2.0000e-005        | 2.0000e-005        | 0.6835        |
| <b>Total</b> | <b>2.4000e-004</b> | <b>1.8000e-004</b> | <b>2.5300e-003</b> | <b>1.0000e-005</b> | <b>8.8000e-004</b> | <b>1.0000e-005</b> | <b>8.8000e-004</b> | <b>2.3000e-004</b> | <b>0.0000</b> | <b>2.4000e-004</b> | <b>0.0000</b> | <b>0.6781</b> | <b>0.6781</b> | <b>2.0000e-005</b> | <b>2.0000e-005</b> | <b>0.6835</b> |

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG           | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |                    |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.1415        |                    |                    |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 9.0000e-004   | 6.0900e-003        | 9.0500e-003        | 1.0000e-005        |               | 3.0000e-004        | 3.0000e-004        |                | 3.0000e-004        | 3.0000e-004        | 0.0000        | 1.2766        | 1.2766        | 7.0000e-005        | 0.0000        | 1.2784        |
| <b>Total</b>    | <b>0.1424</b> | <b>6.0900e-003</b> | <b>9.0500e-003</b> | <b>1.0000e-005</b> |               | <b>3.0000e-004</b> | <b>3.0000e-004</b> |                | <b>3.0000e-004</b> | <b>3.0000e-004</b> | <b>0.0000</b> | <b>1.2766</b> | <b>1.2766</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>1.2784</b> |

**Unmitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 1.0400e-003        | 7.9000e-004        | 0.0111        | 3.0000e-005        | 3.8400e-003        | 2.0000e-005        | 3.8600e-003        | 1.0200e-003        | 2.0000e-005        | 1.0400e-003        | 0.0000        | 2.9665        | 2.9665        | 7.0000e-005        | 7.0000e-005        | 2.9904        |
| <b>Total</b> | <b>1.0400e-003</b> | <b>7.9000e-004</b> | <b>0.0111</b> | <b>3.0000e-005</b> | <b>3.8400e-003</b> | <b>2.0000e-005</b> | <b>3.8600e-003</b> | <b>1.0200e-003</b> | <b>2.0000e-005</b> | <b>1.0400e-003</b> | <b>0.0000</b> | <b>2.9665</b> | <b>2.9665</b> | <b>7.0000e-005</b> | <b>7.0000e-005</b> | <b>2.9904</b> |

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction On-Site**

|                 | ROG           | NOx                | CO                 | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|-----------------|---------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category        | tons/yr       |                    |                    |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Archit. Coating | 0.1415        |                    |                    |                    |               | 0.0000             | 0.0000             |                | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road        | 9.0000e-004   | 6.0900e-003        | 9.0500e-003        | 1.0000e-005        |               | 3.0000e-004        | 3.0000e-004        |                | 3.0000e-004        | 3.0000e-004        | 0.0000        | 1.2766        | 1.2766        | 7.0000e-005        | 0.0000        | 1.2784        |
| <b>Total</b>    | <b>0.1424</b> | <b>6.0900e-003</b> | <b>9.0500e-003</b> | <b>1.0000e-005</b> |               | <b>3.0000e-004</b> | <b>3.0000e-004</b> |                | <b>3.0000e-004</b> | <b>3.0000e-004</b> | <b>0.0000</b> | <b>1.2766</b> | <b>1.2766</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>1.2784</b> |

**Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Worker       | 1.0400e-003        | 7.9000e-004        | 0.0111        | 3.0000e-005        | 3.8400e-003        | 2.0000e-005        | 3.8600e-003        | 1.0200e-003        | 2.0000e-005        | 1.0400e-003        | 0.0000        | 2.9665        | 2.9665        | 7.0000e-005        | 7.0000e-005        | 2.9904        |
| <b>Total</b> | <b>1.0400e-003</b> | <b>7.9000e-004</b> | <b>0.0111</b> | <b>3.0000e-005</b> | <b>3.8400e-003</b> | <b>2.0000e-005</b> | <b>3.8600e-003</b> | <b>1.0200e-003</b> | <b>2.0000e-005</b> | <b>1.0400e-003</b> | <b>0.0000</b> | <b>2.9665</b> | <b>2.9665</b> | <b>7.0000e-005</b> | <b>7.0000e-005</b> | <b>2.9904</b> |

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**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**

Increase Density

|             | ROG     | NOx    | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2  | Total CO2  | CH4    | N2O    | CO2e       |
|-------------|---------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category    | tons/yr |        |         |        |               |              |            |                |               |             | MT/yr    |            |            |        |        |            |
| Mitigated   | 1.0925  | 1.1839 | 10.6777 | 0.0225 | 2.3724        | 0.0167       | 2.3891     | 0.6329         | 0.0155        | 0.6485      | 0.0000   | 2,083.5268 | 2,083.5268 | 0.1512 | 0.0944 | 2,115.4303 |
| Unmitigated | 1.1536  | 1.2857 | 11.6218 | 0.0250 | 2.6360        | 0.0184       | 2.6544     | 0.7033         | 0.0171        | 0.7203      | 0.0000   | 2,308.9243 | 2,308.9243 | 0.1630 | 0.1024 | 2,343.5195 |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| Apartments Mid Rise                 | 1,691.84                | 1,527.01        | 1271.99         | 5,495,854        | 4,946,269        |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| Fast Food Restaurant w/o Drive Thru | 75.86                   | 152.48          | 109.55          | 165,918          | 149,326          |
| Health Club                         | 0.00                    | 0.00            | 0.00            |                  |                  |
| Other Non-Asphalt Surfaces          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Recreational Swimming Pool          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Regional Shopping Center            | 646.48                  | 789.85          | 361.39          | 1,354,446        | 1,219,001        |
| <b>Total</b>                        | <b>2,414.17</b>         | <b>2,469.35</b> | <b>1,742.93</b> | <b>7,016,218</b> | <b>6,314,596</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 Mid Rise            | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86             | 11       | 3       |
| Enclosed Parking with Elevator | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 16.60      | 8.40       | 6.90        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Health Club                    | 16.60      | 8.40       | 6.90        | 16.90      | 64.10      | 19.00       | 52             | 39       | 9       |
| Other Non-Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Recreational Swimming Pool     | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 52             | 39       | 9       |
| Regional Shopping Center       | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54             | 35       | 11      |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Enclosed Parking with Elevator      | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Fast Food Restaurant w/o Drive Thru | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Health Club                         | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Other Non-Asphalt Surfaces          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Recreational Swimming Pool          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Regional Shopping Center            | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Kilowatt Hours of Renewable Electricity Generated

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|                         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e     |
|-------------------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|----------|
| Category                | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |             |          |
| Electricity Mitigated   |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 498.9494  | 498.9494  | 0.0421      | 5.1000e-003 | 501.5234 |
| Electricity Unmitigated |         |        |        |             |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 498.9671  | 498.9671  | 0.0421      | 5.1000e-003 | 501.5412 |
| Natural Gas Mitigated   | 0.0246  | 0.2121 | 0.1005 | 1.3400e-003 |               | 0.0170       | 0.0170     |                | 0.0170        | 0.0170      | 0.0000   | 243.8947  | 243.8947  | 4.6700e-003 | 4.4700e-003 | 245.3441 |
| Natural Gas Unmitigated | 0.0246  | 0.2121 | 0.1005 | 1.3400e-003 |               | 0.0170       | 0.0170     |                | 0.0170        | 0.0170      | 0.0000   | 243.8947  | 243.8947  | 4.6700e-003 | 4.4700e-003 | 245.3441 |

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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**

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                            | kBTU/yr        | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |                    |                    |                 |
| Apartments Mid Rise                 | 4.06371e+006   | 0.0219        | 0.1873        | 0.0797        | 1.2000e-003        |               | 0.0151        | 0.0151        |                | 0.0151        | 0.0151        | 0.0000        | 216.8550        | 216.8550        | 4.1600e-003        | 3.9800e-003        | 218.1437        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 172748         | 9.3000e-004   | 8.4700e-003   | 7.1100e-003   | 5.0000e-005        |               | 6.4000e-004   | 6.4000e-004   |                | 6.4000e-004   | 6.4000e-004   | 0.0000        | 9.2185          | 9.2185          | 1.8000e-004        | 1.7000e-004        | 9.2733          |
| Health Club                         | 309271         | 1.6700e-003   | 0.0152        | 0.0127        | 9.0000e-005        |               | 1.1500e-003   | 1.1500e-003   |                | 1.1500e-003   | 1.1500e-003   | 0.0000        | 16.5039         | 16.5039         | 3.2000e-004        | 3.0000e-004        | 16.6020         |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Regional Shopping Center            | 24686.3        | 1.3000e-004   | 1.2100e-003   | 1.0200e-003   | 1.0000e-005        |               | 9.0000e-005   | 9.0000e-005   |                | 9.0000e-005   | 9.0000e-005   | 0.0000        | 1.3174          | 1.3174          | 3.0000e-005        | 2.0000e-005        | 1.3252          |
| <b>Total</b>                        |                | <b>0.0246</b> | <b>0.2121</b> | <b>0.1005</b> | <b>1.3500e-003</b> |               | <b>0.0170</b> | <b>0.0170</b> |                | <b>0.0170</b> | <b>0.0170</b> | <b>0.0000</b> | <b>243.8947</b> | <b>243.8947</b> | <b>4.6900e-003</b> | <b>4.4700e-003</b> | <b>245.3441</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**

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Land Use                            | kBTU/yr        | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                 |                 |                    |                    |                 |
| Apartments Mid Rise                 | 4.06371e+006   | 0.0219        | 0.1873        | 0.0797        | 1.2000e-003        |               | 0.0151        | 0.0151        |                | 0.0151        | 0.0151        | 0.0000        | 216.8550        | 216.8550        | 4.1600e-003        | 3.9800e-003        | 218.1437        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 172748         | 9.3000e-004   | 8.4700e-003   | 7.1100e-003   | 5.0000e-005        |               | 6.4000e-004   | 6.4000e-004   |                | 6.4000e-004   | 6.4000e-004   | 0.0000        | 9.2185          | 9.2185          | 1.8000e-004        | 1.7000e-004        | 9.2733          |
| Health Club                         | 309271         | 1.6700e-003   | 0.0152        | 0.0127        | 9.0000e-005        |               | 1.1500e-003   | 1.1500e-003   |                | 1.1500e-003   | 1.1500e-003   | 0.0000        | 16.5039         | 16.5039         | 3.2000e-004        | 3.0000e-004        | 16.6020         |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Regional Shopping Center            | 24686.3        | 1.3000e-004   | 1.2100e-003   | 1.0200e-003   | 1.0000e-005        |               | 9.0000e-005   | 9.0000e-005   |                | 9.0000e-005   | 9.0000e-005   | 0.0000        | 1.3174          | 1.3174          | 3.0000e-005        | 2.0000e-005        | 1.3252          |
| <b>Total</b>                        |                | <b>0.0246</b> | <b>0.2121</b> | <b>0.1005</b> | <b>1.3500e-003</b> |               | <b>0.0170</b> | <b>0.0170</b> |                | <b>0.0170</b> | <b>0.0170</b> | <b>0.0000</b> | <b>243.8947</b> | <b>243.8947</b> | <b>4.6900e-003</b> | <b>4.4700e-003</b> | <b>245.3441</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<br>kWh/yr | Total CO2<br>MT/yr | CH4<br>MT/yr  | N2O<br>MT/yr       | CO2e<br>MT/yr   |
|-------------------------------------|---------------------------|--------------------|---------------|--------------------|-----------------|
| Apartments Mid Rise                 | 1.19715e+006              | 212.3088           | 0.0179        | 2.1700e-003        | 213.4041        |
| Enclosed Parking with Elevator      | 1.19898e+006              | 212.6331           | 0.0180        | 2.1800e-003        | 213.7300        |
| Fast Food Restaurant w/o Drive Thru | 32452.5                   | 5.7553             | 4.9000e-004   | 6.0000e-005        | 5.7850          |
| Health Club                         | 187009                    | 33.1653            | 2.8000e-003   | 3.4000e-004        | 33.3363         |
| Other Non-Asphalt Surfaces          | 0                         | 0.0000             | 0.0000        | 0.0000             | 0.0000          |
| Recreational Swimming Pool          | 0                         | 0.0000             | 0.0000        | 0.0000             | 0.0000          |
| Regional Shopping Center            | 197945                    | 35.1047            | 2.9600e-003   | 3.6000e-004        | 35.2858         |
| <b>Total</b>                        |                           | <b>498.9671</b>    | <b>0.0421</b> | <b>5.1100e-003</b> | <b>501.5412</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 | Total CO2       | CH4           | N2O                | CO2e            |
|-------------------------------------|-----------------|-----------------|---------------|--------------------|-----------------|
| Land Use                            | kWh/yr          | MT/yr           |               |                    |                 |
| Apartments Mid Rise                 | 1.19713e+006    | 212.3063        | 0.0179        | 2.1700e-003        | 213.4016        |
| Enclosed Parking with Elevator      | 1.19896e+006    | 212.6305        | 0.0180        | 2.1800e-003        | 213.7274        |
| Fast Food Restaurant w/o Drive Thru | 32438.2         | 5.7528          | 4.9000e-004   | 6.0000e-005        | 5.7825          |
| Health Club                         | 186995          | 33.1627         | 2.8000e-003   | 3.4000e-004        | 33.3338         |
| Other Non-Asphalt Surfaces          | -14.2857        | -0.0025         | 0.0000        | 0.0000             | -0.0026         |
| Recreational Swimming Pool          | -14.2857        | -0.0025         | 0.0000        | 0.0000             | -0.0026         |
| Regional Shopping Center            | 197931          | 35.1022         | 2.9600e-003   | 3.6000e-004        | 35.2832         |
| <b>Total</b>                        |                 | <b>498.9494</b> | <b>0.0421</b> | <b>5.1100e-003</b> | <b>501.5234</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

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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    |
|-------------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Category    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |             |         |
| Mitigated   | 1.4832  | 0.0918 | 3.2373 | 5.2000e-004 |               | 0.0222       | 0.0222     |                | 0.0222        | 0.0222      | 0.0000   | 68.7349   | 68.7349   | 6.2800e-003 | 1.1600e-003 | 69.2388 |
| Unmitigated | 1.4832  | 0.0918 | 3.2373 | 5.2000e-004 |               | 0.0222       | 0.0222     |                | 0.0222        | 0.0222      | 0.0000   | 68.7349   | 68.7349   | 6.2800e-003 | 1.1600e-003 | 69.2388 |

**6.2 Area by SubCategory**

**Unmitigated**

|                       | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| SubCategory           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |                    |                |
| Architectural Coating | 0.1166        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Consumer Products     | 1.2631        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Hearth                | 6.4100e-003   | 0.0548        | 0.0233        | 3.5000e-004        |               | 4.4300e-003   | 4.4300e-003   |                | 4.4300e-003   | 4.4300e-003   | 0.0000        | 63.4803        | 63.4803        | 1.2200e-003        | 1.1600e-003        | 63.8575        |
| Landscaping           | 0.0971        | 0.0370        | 3.2139        | 1.7000e-004        |               | 0.0178        | 0.0178        |                | 0.0178        | 0.0178        | 0.0000        | 5.2547         | 5.2547         | 5.0700e-003        | 0.0000             | 5.3814         |
| <b>Total</b>          | <b>1.4832</b> | <b>0.0918</b> | <b>3.2373</b> | <b>5.2000e-004</b> |               | <b>0.0222</b> | <b>0.0222</b> |                | <b>0.0222</b> | <b>0.0222</b> | <b>0.0000</b> | <b>68.7349</b> | <b>68.7349</b> | <b>6.2900e-003</b> | <b>1.1600e-003</b> | <b>69.2388</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

|                       | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|-----------------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| SubCategory           | tons/yr       |               |               |                    |               |               |               |                |               |               | MT/yr         |                |                |                    |                    |                |
| Architectural Coating | 0.1166        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Consumer Products     | 1.2631        |               |               |                    |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Hearth                | 6.4100e-003   | 0.0548        | 0.0233        | 3.5000e-004        |               | 4.4300e-003   | 4.4300e-003   |                | 4.4300e-003   | 4.4300e-003   | 0.0000        | 63.4803        | 63.4803        | 1.2200e-003        | 1.1600e-003        | 63.8575        |
| Landscaping           | 0.0971        | 0.0370        | 3.2139        | 1.7000e-004        |               | 0.0178        | 0.0178        |                | 0.0178        | 0.0178        | 0.0000        | 5.2547         | 5.2547         | 5.0700e-003        | 0.0000             | 5.3814         |
| <b>Total</b>          | <b>1.4832</b> | <b>0.0918</b> | <b>3.2373</b> | <b>5.2000e-004</b> |               | <b>0.0222</b> | <b>0.0222</b> |                | <b>0.0222</b> | <b>0.0222</b> | <b>0.0000</b> | <b>68.7349</b> | <b>68.7349</b> | <b>6.2900e-003</b> | <b>1.1600e-003</b> | <b>69.2388</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

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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   | 87.0093   | 0.7570 | 0.0185 | 111.4564 |
| Unmitigated | 88.7331   | 0.7571 | 0.0186 | 113.1891 |

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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**

|                                     | Indoor/Outdoor Use  | Total CO2      | CH4           | N2O           | CO2e            |
|-------------------------------------|---------------------|----------------|---------------|---------------|-----------------|
| Land Use                            | Mgal                | MT/yr          |               |               |                 |
| Apartments Mid Rise                 | 20.2629 / 12.7744   | 78.3895        | 0.6663        | 0.0163        | 99.9133         |
| Enclosed Parking with Elevator      | 0 / 0               | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 0.22765 / 0.0145309 | 0.6266         | 7.4600e-003   | 1.8000e-004   | 0.8671          |
| Health Club                         | 1.01844 / 0.624208  | 3.9048         | 0.0335        | 8.2000e-004   | 4.9864          |
| Other Non-Asphalt Surfaces          | 0 / 0               | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Recreational Swimming Pool          | 0.394485 / 0.241781 | 1.5125         | 0.0130        | 3.2000e-004   | 1.9315          |
| Regional Shopping Center            | 1.12146 / 0.687345  | 4.2998         | 0.0369        | 9.0000e-004   | 5.4908          |
| <b>Total</b>                        |                     | <b>88.7331</b> | <b>0.7571</b> | <b>0.0186</b> | <b>113.1891</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

|                                     | Indoor/Outdoor Use  | Total CO2      | CH4           | N2O           | CO2e            |
|-------------------------------------|---------------------|----------------|---------------|---------------|-----------------|
| Land Use                            | Mgal                | MT/yr          |               |               |                 |
| Apartments Mid Rise                 | 20.2629 / 11.9952   | 76.8542        | 0.6662        | 0.0163        | 98.3701         |
| Enclosed Parking with Elevator      | 0 / 0               | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 0.22765 / 0.0136445 | 0.6248         | 7.4600e-003   | 1.8000e-004   | 0.8653          |
| Health Club                         | 1.01844 / 0.586131  | 3.8298         | 0.0335        | 8.2000e-004   | 4.9110          |
| Other Non-Asphalt Surfaces          | 0 / 0               | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Recreational Swimming Pool          | 0.394485 / 0.227032 | 1.4834         | 0.0130        | 3.2000e-004   | 1.9022          |
| Regional Shopping Center            | 1.12146 / 0.645417  | 4.2172         | 0.0369        | 9.0000e-004   | 5.4078          |
| <b>Total</b>                        |                     | <b>87.0093</b> | <b>0.7570</b> | <b>0.0185</b> | <b>111.4564</b> |

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

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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     |
|-------------|-----------|--------|--------|----------|
|             | MT/yr     |        |        |          |
| Mitigated   | 61.6626   | 3.6442 | 0.0000 | 152.7664 |
| Unmitigated | 61.6626   | 3.6442 | 0.0000 | 152.7664 |



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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**

**Unmitigated**

|                                     | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-------------------------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use                            | tons           | MT/yr          |               |               |                 |
| Apartments Mid Rise                 | 143.06         | 29.0399        | 1.7162        | 0.0000        | 71.9451         |
| Enclosed Parking with Elevator      | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 8.64           | 1.7538         | 0.1037        | 0.0000        | 4.3451          |
| Health Club                         | 98.15          | 19.9236        | 1.1775        | 0.0000        | 49.3598         |
| Other Non-Asphalt Surfaces          | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Recreational Swimming Pool          | 38.02          | 7.7177         | 0.4561        | 0.0000        | 19.1203         |
| Regional Shopping Center            | 15.9           | 3.2276         | 0.1907        | 0.0000        | 7.9961          |
| <b>Total</b>                        |                | <b>61.6626</b> | <b>3.6442</b> | <b>0.0000</b> | <b>152.7664</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

|                                     | Waste Disposed | Total CO2      | CH4           | N2O           | CO2e            |
|-------------------------------------|----------------|----------------|---------------|---------------|-----------------|
| Land Use                            | tons           | MT/yr          |               |               |                 |
| Apartments Mid Rise                 | 143.06         | 29.0399        | 1.7162        | 0.0000        | 71.9451         |
| Enclosed Parking with Elevator      | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Fast Food Restaurant w/o Drive Thru | 8.64           | 1.7538         | 0.1037        | 0.0000        | 4.3451          |
| Health Club                         | 98.15          | 19.9236        | 1.1775        | 0.0000        | 49.3598         |
| Other Non-Asphalt Surfaces          | 0              | 0.0000         | 0.0000        | 0.0000        | 0.0000          |
| Recreational Swimming Pool          | 38.02          | 7.7177         | 0.4561        | 0.0000        | 19.1203         |
| Regional Shopping Center            | 15.9           | 3.2276         | 0.1907        | 0.0000        | 7.9961          |
| <b>Total</b>                        |                | <b>61.6626</b> | <b>3.6442</b> | <b>0.0000</b> | <b>152.7664</b> |

**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 |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Annual

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

**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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Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**Alexan Arcadia EIR Alternative Analysis  
Los Angeles-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Enclosed Parking with Elevator      | 551.00 | Space         | 1.24        | 220,400.00         | 0          |
| Other Non-Asphalt Surfaces          | 41.35  | 1000sqft      | 0.95        | 41,350.00          | 0          |
| Fast Food Restaurant w/o Drive Thru | 0.75   | 1000sqft      | 0.02        | 750.00             | 0          |
| Health Club                         | 17.22  | 1000sqft      | 0.00        | 17,220.00          | 0          |
| Recreational Swimming Pool          | 6.67   | 1000sqft      | 0.00        | 6,670.00           | 0          |
| Apartments Mid Rise                 | 311.00 | Dwelling Unit | 0.00        | 311,000.00         | 889        |
| Regional Shopping Center            | 15.14  | 1000sqft      | 0.35        | 15,145.00          | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2024  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 390.98                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.033 | <b>N2O Intensity (lb/MW hr)</b>  | 0.004 |

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

Project Characteristics - Alternative operational analysis only. Change live-work to commercial space.

Land Use - Lot acre = ground lvl land use = 2.95 gross site area. SF Based on prelim design study. For Alternative live-work area changed to commercial/retail. Health Club = Fitness and Game Room and common rooms. Fast food = cafe.

Construction Phase - Building construction schedule provided by applicant.

Off-road Equipment - Default values

Off-road Equipment - Default values

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

Off-road Equipment - Default values

Off-road Equipment - Default values + 1 excavator added for excavation of subterranean parking, applicant confirmed.

Off-road Equipment - Default values

Off-road Equipment - Default values

Trips and VMT - Rounded trips to even values. Grading haul trips provided by applicant includes excavation.

Demolition - Removal of 94,815 sqft of paved surface and demolition of 17,324 sqft of existing buildings

Grading - Per applicant provided information for materials, graded area default values.

Architectural Coating - No-VOC coatings will be used for the proejct pre applicant. 5 g/L assumed.

Vehicle Trips - Based on TIA. General Office Building based on TIA traffic data for Live-Work spaces.

Woodstoves - No woodstoves or wood fireplaces.

Area Coating - No-VOC paint per applicant. 5 g/L assumed.

Energy Use - Default values

Water And Wastewater - Default values.

Solid Waste - Default values.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - No-VOC paint per applicant

Energy Mitigation - Applicant provided information for onsite solar energy.

Water Mitigation -

Fleet Mix -

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 16,927.00     | 16,929.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 50,780.00     | 50,786.00 |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Residential_Exterior           | 50.00         | 5.00      |
| tblArchitecturalCoating | EF_Residential_Interior           | 50.00         | 5.00      |
| tblAreaCoating          | Area_Nonresidential_Exterior      | 16927         | 16929     |

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|                      |                              |           |           |
|----------------------|------------------------------|-----------|-----------|
| tblAreaCoating       | Area_Nonresidential_Interior | 50780     | 50786     |
| tblConstructionPhase | NumDays                      | 220.00    | 513.00    |
| tblConstructionPhase | NumDays                      | 6.00      | 15.00     |
| tblFireplaces        | FireplaceWoodMass            | 1,019.20  | 0.00      |
| tblFireplaces        | NumberWood                   | 15.55     | 0.00      |
| tblGrading           | MaterialExported             | 0.00      | 52,000.00 |
| tblGrading           | MaterialImported             | 0.00      | 520.00    |
| tblLandUse           | LandUseSquareFeet            | 15,140.00 | 15,145.00 |
| tblLandUse           | LotAcreage                   | 4.96      | 1.24      |
| tblLandUse           | LotAcreage                   | 0.40      | 0.00      |
| tblLandUse           | LotAcreage                   | 0.15      | 0.00      |
| tblLandUse           | LotAcreage                   | 8.18      | 0.00      |
| tblTripsAndVMT       | HaulingTripNumber            | 0.00      | 2,100.00  |
| tblTripsAndVMT       | VendorTripNumber             | 83.00     | 84.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 14.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 10.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 349.00    | 348.00    |
| tblTripsAndVMT       | WorkerTripNumber             | 15.00     | 16.00     |
| tblVehicleTrips      | ST_TR                        | 696.00    | 203.31    |
| tblVehicleTrips      | ST_TR                        | 20.87     | 0.00      |
| tblVehicleTrips      | ST_TR                        | 9.10      | 0.00      |
| tblVehicleTrips      | ST_TR                        | 46.12     | 52.17     |
| tblVehicleTrips      | SU_TR                        | 500.00    | 146.06    |
| tblVehicleTrips      | SU_TR                        | 26.73     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 13.60     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 21.10     | 23.87     |
| tblVehicleTrips      | WD_TR                        | 346.23    | 101.14    |
| tblVehicleTrips      | WD_TR                        | 32.93     | 0.00      |
| tblVehicleTrips      | WD_TR                        | 28.82     | 0.00      |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

|                 |                    |        |       |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | WD_TR              | 37.75  | 42.70 |
| tblWoodstoves   | NumberCatalytic    | 15.55  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 15.55  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |

**2.0 Emissions Summary**

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Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|                | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Year           | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| 2022           | 3.7962         | 91.5637        | 29.8380        | 0.2961        | 15.1713        | 1.3696        | 16.5410        | 5.5933         | 1.2799        | 6.8732        | 0.0000        | 32,099.11<br>77         | 32,099.11<br>77         | 2.3768        | 4.6831        | 33,554.10<br>16         |
| 2023           | 2.9329         | 18.1587        | 28.1828        | 0.0775        | 4.4995         | 0.6566        | 5.1561         | 1.2062         | 0.6283        | 1.8345        | 0.0000        | 7,715.235<br>6          | 7,715.235<br>6          | 0.5916        | 0.3640        | 7,838.488<br>6          |
| 2024           | 31.4354        | 25.4176        | 39.3986        | 0.0956        | 5.2820         | 0.9769        | 5.9276         | 1.4137         | 0.9209        | 2.1745        | 0.0000        | 9,453.412<br>5          | 9,453.412<br>5          | 1.1227        | 0.3694        | 9,588.112<br>2          |
| <b>Maximum</b> | <b>31.4354</b> | <b>91.5637</b> | <b>39.3986</b> | <b>0.2961</b> | <b>15.1713</b> | <b>1.3696</b> | <b>16.5410</b> | <b>5.5933</b>  | <b>1.2799</b> | <b>6.8732</b> | <b>0.0000</b> | <b>32,099.11<br/>77</b> | <b>32,099.11<br/>77</b> | <b>2.3768</b> | <b>4.6831</b> | <b>33,554.10<br/>16</b> |

**Mitigated Construction**

|                | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Year           | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| 2022           | 3.7962         | 91.5637        | 29.8380        | 0.2961        | 11.0603        | 1.3696        | 12.4299        | 3.6770         | 1.2799        | 4.9570        | 0.0000        | 32,099.11<br>77         | 32,099.11<br>77         | 2.3768        | 4.6831        | 33,554.10<br>16         |
| 2023           | 2.9329         | 18.1587        | 28.1828        | 0.0775        | 4.4995         | 0.6566        | 5.1561         | 1.2062         | 0.6283        | 1.8345        | 0.0000        | 7,715.235<br>6          | 7,715.235<br>6          | 0.5916        | 0.3640        | 7,838.488<br>6          |
| 2024           | 31.4354        | 25.4176        | 39.3986        | 0.0956        | 5.2820         | 0.9769        | 5.9276         | 1.4137         | 0.9209        | 2.1745        | 0.0000        | 9,453.412<br>5          | 9,453.412<br>5          | 1.1227        | 0.3694        | 9,588.112<br>2          |
| <b>Maximum</b> | <b>31.4354</b> | <b>91.5637</b> | <b>39.3986</b> | <b>0.2961</b> | <b>11.0603</b> | <b>1.3696</b> | <b>12.4299</b> | <b>3.6770</b>  | <b>1.2799</b> | <b>4.9570</b> | <b>0.0000</b> | <b>32,099.11<br/>77</b> | <b>32,099.11<br/>77</b> | <b>2.3768</b> | <b>4.6831</b> | <b>33,554.10<br/>16</b> |





Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| Area         | 8.8501         | 4.6812         | 27.5775        | 0.0294        |                | 0.4969        | 0.4969         |                | 0.4969        | 0.4969        | 0.0000        | 5,644.338<br>1          | 5,644.338<br>1          | 0.1520        | 0.1026        | 5,678.721<br>5          |
| Energy       | 0.1350         | 1.1621         | 0.5509         | 7.3700e-003   |                | 0.0933        | 0.0933         |                | 0.0933        | 0.0933        |               | 1,473.139<br>3          | 1,473.139<br>3          | 0.0282        | 0.0270        | 1,481.893<br>4          |
| Mobile       | 7.3631         | 7.1804         | 71.6770        | 0.1569        | 16.3497        | 0.1122        | 16.4619        | 4.3551         | 0.1042        | 4.4592        |               | 15,999.25<br>36         | 15,999.25<br>36         | 1.0726        | 0.6570        | 16,221.84<br>73         |
| <b>Total</b> | <b>16.3482</b> | <b>13.0237</b> | <b>99.8055</b> | <b>0.1937</b> | <b>16.3497</b> | <b>0.7024</b> | <b>17.0521</b> | <b>4.3551</b>  | <b>0.6944</b> | <b>5.0495</b> | <b>0.0000</b> | <b>23,116.73<br/>10</b> | <b>23,116.73<br/>10</b> | <b>1.2528</b> | <b>0.7866</b> | <b>23,382.46<br/>22</b> |

**Mitigated Operational**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| Area         | 8.8501         | 4.6812         | 27.5775        | 0.0294        |                | 0.4969        | 0.4969         |                | 0.4969        | 0.4969        | 0.0000        | 5,644.338<br>1          | 5,644.338<br>1          | 0.1520        | 0.1026        | 5,678.721<br>5          |
| Energy       | 0.1350         | 1.1621         | 0.5509         | 7.3700e-003   |                | 0.0933        | 0.0933         |                | 0.0933        | 0.0933        |               | 1,473.139<br>3          | 1,473.139<br>3          | 0.0282        | 0.0270        | 1,481.893<br>4          |
| Mobile       | 6.9953         | 6.6200         | 65.6817        | 0.1416        | 14.7147        | 0.1020        | 14.8167        | 3.9196         | 0.0947        | 4.0143        |               | 14,436.65<br>42         | 14,436.65<br>42         | 0.9931        | 0.6058        | 14,642.00<br>03         |
| <b>Total</b> | <b>15.9805</b> | <b>12.4633</b> | <b>93.8102</b> | <b>0.1783</b> | <b>14.7147</b> | <b>0.6922</b> | <b>15.4069</b> | <b>3.9196</b>  | <b>0.6849</b> | <b>4.6045</b> | <b>0.0000</b> | <b>21,554.13<br/>16</b> | <b>21,554.13<br/>16</b> | <b>1.1733</b> | <b>0.7354</b> | <b>21,802.61<br/>52</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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 | 2.25 | 4.30 | 6.01 | 7.92 | 10.00         | 1.45         | 9.65       | 10.00          | 1.37          | 8.81        | 0.00     | 6.76     | 6.76      | 6.35 | 6.51 | 6.76 |

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 7/1/2022   | 7/28/2022 | 5             | 20       |                   |
| 2            | Site Preparation      | Site Preparation      | 7/29/2022  | 8/2/2022  | 5             | 3        |                   |
| 3            | Grading               | Grading               | 8/3/2022   | 8/23/2022 | 5             | 15       |                   |
| 4            | Building Construction | Building Construction | 8/24/2022  | 8/11/2024 | 5             | 513      |                   |
| 5            | Paving                | Paving                | 6/15/2024  | 6/28/2024 | 5             | 10       |                   |
| 6            | Architectural Coating | Architectural Coating | 6/29/2024  | 7/12/2024 | 5             | 10       |                   |

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 15**

**Acres of Paving: 2.19**

**Residential Indoor: 629,775; Residential Outdoor: 209,925; Non-Residential Indoor: 50,786; Non-Residential Outdoor: 16,929; Striped Parking Area: 15,705 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name       | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition       | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Demolition       | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Demolition       | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Site Preparation | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Site Preparation | Scrapers                  | 1      | 8.00        | 367         | 0.48        |

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

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Site Preparation      | Tractors/Loaders/Backhoes | 1 | 7.00 | 97  | 0.37 |
| Grading               | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Grading               | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Grading               | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading               | Tractors/Loaders/Backhoes | 2 | 7.00 | 97  | 0.37 |
| Building Construction | Cranes                    | 1 | 8.00 | 231 | 0.29 |
| Building Construction | Forklifts                 | 2 | 7.00 | 89  | 0.20 |
| Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97  | 0.37 |
| Building Construction | Welders                   | 3 | 8.00 | 46  | 0.45 |
| Paving                | Cement and Mortar Mixers  | 1 | 8.00 | 9   | 0.56 |
| Paving                | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment          | 1 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Architectural Coating | Air Compressors           | 1 | 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 |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 14.00              | 0.00               | 485.00              | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation      | 3                       | 8.00               | 0.00               | 65.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 5                       | 10.00              | 0.00               | 6,500.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 348.00             | 84.00              | 2,100.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 16.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 70.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

Water Exposed Area

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 5.2498        | 0.0000        | 5.2498        | 0.7949         | 0.0000        | 0.7949        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.6889        | 16.6217        | 13.9605        | 0.0241        |               | 0.8379        | 0.8379        |                | 0.7829        | 0.7829        |          | 2,323.4168        | 2,323.4168        | 0.5921        |     | 2,338.2191        |
| <b>Total</b>  | <b>1.6889</b> | <b>16.6217</b> | <b>13.9605</b> | <b>0.0241</b> | <b>5.2498</b> | <b>0.8379</b> | <b>6.0877</b> | <b>0.7949</b>  | <b>0.7829</b> | <b>1.5778</b> |          | <b>2,323.4168</b> | <b>2,323.4168</b> | <b>0.5921</b> |     | <b>2,338.2191</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1130        | 4.0728        | 0.9496        | 0.0151        | 0.4245        | 0.0303        | 0.4547        | 0.1164         | 0.0290        | 0.1453        |          | 1,650.8808        | 1,650.8808        | 0.0877        | 0.2619        | 1,731.1291        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0484        | 0.0354        | 0.5510        | 1.4300e-003   | 0.1565        | 1.0000e-003   | 0.1575        | 0.0415         | 9.2000e-004   | 0.0424        |          | 144.6819          | 144.6819          | 3.9400e-003   | 3.5000e-003   | 145.8244          |
| <b>Total</b> | <b>0.1614</b> | <b>4.1081</b> | <b>1.5006</b> | <b>0.0165</b> | <b>0.5810</b> | <b>0.0313</b> | <b>0.6122</b> | <b>0.1579</b>  | <b>0.0299</b> | <b>0.1877</b> |          | <b>1,795.5627</b> | <b>1,795.5627</b> | <b>0.0916</b> | <b>0.2654</b> | <b>1,876.9535</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 2.3624        | 0.0000        | 2.3624        | 0.3577         | 0.0000        | 0.3577        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.6889        | 16.6217        | 13.9605        | 0.0241        |               | 0.8379        | 0.8379        |                | 0.7829        | 0.7829        | 0.0000        | 2,323.4168        | 2,323.4168        | 0.5921        |     | 2,338.2191        |
| <b>Total</b>  | <b>1.6889</b> | <b>16.6217</b> | <b>13.9605</b> | <b>0.0241</b> | <b>2.3624</b> | <b>0.8379</b> | <b>3.2003</b> | <b>0.3577</b>  | <b>0.7829</b> | <b>1.1406</b> | <b>0.0000</b> | <b>2,323.4168</b> | <b>2,323.4168</b> | <b>0.5921</b> |     | <b>2,338.2191</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1130        | 4.0728        | 0.9496        | 0.0151        | 0.4245        | 0.0303        | 0.4547        | 0.1164         | 0.0290        | 0.1453        |          | 1,650.8808        | 1,650.8808        | 0.0877        | 0.2619        | 1,731.1291        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0484        | 0.0354        | 0.5510        | 1.4300e-003   | 0.1565        | 1.0000e-003   | 0.1575        | 0.0415         | 9.2000e-004   | 0.0424        |          | 144.6819          | 144.6819          | 3.9400e-003   | 3.5000e-003   | 145.8244          |
| <b>Total</b> | <b>0.1614</b> | <b>4.1081</b> | <b>1.5006</b> | <b>0.0165</b> | <b>0.5810</b> | <b>0.0313</b> | <b>0.6122</b> | <b>0.1579</b>  | <b>0.0299</b> | <b>0.1877</b> |          | <b>1,795.5627</b> | <b>1,795.5627</b> | <b>0.0916</b> | <b>0.2654</b> | <b>1,876.9535</b> |

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 1.6104        | 0.0000        | 1.6104        | 0.1747         | 0.0000        | 0.1747        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.3784        | 15.6673        | 10.0558        | 0.0245        |               | 0.5952        | 0.5952        |                | 0.5476        | 0.5476        |          | 2,375.1569        | 2,375.1569        | 0.7682        |     | 2,394.3613        |
| <b>Total</b>  | <b>1.3784</b> | <b>15.6673</b> | <b>10.0558</b> | <b>0.0245</b> | <b>1.6104</b> | <b>0.5952</b> | <b>2.2055</b> | <b>0.1747</b>  | <b>0.5476</b> | <b>0.7223</b> |          | <b>2,375.1569</b> | <b>2,375.1569</b> | <b>0.7682</b> |     | <b>2,394.3613</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1009        | 3.6389        | 0.8485        | 0.0135        | 0.3793        | 0.0270        | 0.4063        | 0.1040         | 0.0259        | 0.1298        |          | 1,475.0138        | 1,475.0138        | 0.0783        | 0.2340        | 1,546.7133        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0277        | 0.0202        | 0.3149        | 8.2000e-004   | 0.0894        | 5.7000e-004   | 0.0900        | 0.0237         | 5.3000e-004   | 0.0242        |          | 82.6754           | 82.6754           | 2.2500e-003   | 2.0000e-003   | 83.3282           |
| <b>Total</b> | <b>0.1286</b> | <b>3.6591</b> | <b>1.1633</b> | <b>0.0143</b> | <b>0.4687</b> | <b>0.0276</b> | <b>0.4963</b> | <b>0.1277</b>  | <b>0.0264</b> | <b>0.1541</b> |          | <b>1,557.6891</b> | <b>1,557.6891</b> | <b>0.0806</b> | <b>0.2360</b> | <b>1,630.0415</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 0.7247        | 0.0000        | 0.7247        | 0.0786         | 0.0000        | 0.0786        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.3784        | 15.6673        | 10.0558        | 0.0245        |               | 0.5952        | 0.5952        |                | 0.5476        | 0.5476        | 0.0000        | 2,375.1569        | 2,375.1569        | 0.7682        |     | 2,394.3613        |
| <b>Total</b>  | <b>1.3784</b> | <b>15.6673</b> | <b>10.0558</b> | <b>0.0245</b> | <b>0.7247</b> | <b>0.5952</b> | <b>1.3198</b> | <b>0.0786</b>  | <b>0.5476</b> | <b>0.6262</b> | <b>0.0000</b> | <b>2,375.1569</b> | <b>2,375.1569</b> | <b>0.7682</b> |     | <b>2,394.3613</b> |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1009        | 3.6389        | 0.8485        | 0.0135        | 0.3793        | 0.0270        | 0.4063        | 0.1040         | 0.0259        | 0.1298        |          | 1,475.0138        | 1,475.0138        | 0.0783        | 0.2340        | 1,546.7133        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0277        | 0.0202        | 0.3149        | 8.2000e-004   | 0.0894        | 5.7000e-004   | 0.0900        | 0.0237         | 5.3000e-004   | 0.0242        |          | 82.6754           | 82.6754           | 2.2500e-003   | 2.0000e-003   | 83.3282           |
| <b>Total</b> | <b>0.1286</b> | <b>3.6591</b> | <b>1.1633</b> | <b>0.0143</b> | <b>0.4687</b> | <b>0.0276</b> | <b>0.4963</b> | <b>0.1277</b>  | <b>0.0264</b> | <b>0.1541</b> |          | <b>1,557.6891</b> | <b>1,557.6891</b> | <b>0.0806</b> | <b>0.2360</b> | <b>1,630.0415</b> |

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 7.4746        | 0.0000        | 7.4746        | 3.4841         | 0.0000        | 3.4841        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.7428        | 18.7606        | 12.4753        | 0.0258        |               | 0.8282        | 0.8282        |                | 0.7619        | 0.7619        |          | 2,495.4977        | 2,495.4977        | 0.8071        |     | 2,515.6751        |
| <b>Total</b>  | <b>1.7428</b> | <b>18.7606</b> | <b>12.4753</b> | <b>0.0258</b> | <b>7.4746</b> | <b>0.8282</b> | <b>8.3028</b> | <b>3.4841</b>  | <b>0.7619</b> | <b>4.2460</b> |          | <b>2,495.4977</b> | <b>2,495.4977</b> | <b>0.8071</b> |     | <b>2,515.6751</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Hauling      | 2.0189        | 72.7778        | 16.9691        | 0.2693        | 7.5849        | 0.5407        | 8.1256        | 2.0796         | 0.5173        | 2.5969        |          | 29,500.2758        | 29,500.2758        | 1.5669        | 4.6806        | 30,934.2662        |
| Vendor       | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Worker       | 0.0346        | 0.0253         | 0.3936         | 1.0200e-003   | 0.1118        | 7.2000e-004   | 0.1125        | 0.0296         | 6.6000e-004   | 0.0303        |          | 103.3442           | 103.3442           | 2.8200e-003   | 2.5000e-003   | 104.1603           |
| <b>Total</b> | <b>2.0535</b> | <b>72.8031</b> | <b>17.3627</b> | <b>0.2703</b> | <b>7.6967</b> | <b>0.5414</b> | <b>8.2381</b> | <b>2.1092</b>  | <b>0.5180</b> | <b>2.6272</b> |          | <b>29,603.6200</b> | <b>29,603.6200</b> | <b>1.5697</b> | <b>4.6831</b> | <b>31,038.4265</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 3.3636        | 0.0000        | 3.3636        | 1.5679         | 0.0000        | 1.5679        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.7428        | 18.7606        | 12.4753        | 0.0258        |               | 0.8282        | 0.8282        |                | 0.7619        | 0.7619        | 0.0000        | 2,495.4977        | 2,495.4977        | 0.8071        |     | 2,515.6751        |
| <b>Total</b>  | <b>1.7428</b> | <b>18.7606</b> | <b>12.4753</b> | <b>0.0258</b> | <b>3.3636</b> | <b>0.8282</b> | <b>4.1918</b> | <b>1.5679</b>  | <b>0.7619</b> | <b>2.3298</b> | <b>0.0000</b> | <b>2,495.4977</b> | <b>2,495.4977</b> | <b>0.8071</b> |     | <b>2,515.6751</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Hauling      | 2.0189        | 72.7778        | 16.9691        | 0.2693        | 7.5849        | 0.5407        | 8.1256        | 2.0796         | 0.5173        | 2.5969        |          | 29,500.2758        | 29,500.2758        | 1.5669        | 4.6806        | 30,934.2662        |
| Vendor       | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Worker       | 0.0346        | 0.0253         | 0.3936         | 1.0200e-003   | 0.1118        | 7.2000e-004   | 0.1125        | 0.0296         | 6.6000e-004   | 0.0303        |          | 103.3442           | 103.3442           | 2.8200e-003   | 2.5000e-003   | 104.1603           |
| <b>Total</b> | <b>2.0535</b> | <b>72.8031</b> | <b>17.3627</b> | <b>0.2703</b> | <b>7.6967</b> | <b>0.5414</b> | <b>8.2381</b> | <b>2.1092</b>  | <b>0.5180</b> | <b>2.6272</b> |          | <b>29,603.6200</b> | <b>29,603.6200</b> | <b>1.5697</b> | <b>4.6831</b> | <b>31,038.4265</b> |

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.8555        | 14.6040        | 14.3533        | 0.0250        |               | 0.7022        | 0.7022        |                | 0.6731        | 0.6731        |          | 2,289.2813        | 2,289.2813        | 0.4417        |     | 2,300.3230        |
| <b>Total</b> | <b>1.8555</b> | <b>14.6040</b> | <b>14.3533</b> | <b>0.0250</b> |               | <b>0.7022</b> | <b>0.7022</b> |                | <b>0.6731</b> | <b>0.6731</b> |          | <b>2,289.2813</b> | <b>2,289.2813</b> | <b>0.4417</b> |     | <b>2,300.3230</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0191        | 0.6875        | 0.1603         | 2.5400e-003   | 0.0717        | 5.1100e-003   | 0.0768        | 0.0196         | 4.8900e-003   | 0.0245        |          | 278.6801          | 278.6801          | 0.0148        | 0.0442        | 292.2265          |
| Vendor       | 0.1653        | 4.1147        | 1.4108         | 0.0165        | 0.5381        | 0.0392        | 0.5772        | 0.1549         | 0.0375        | 0.1924        |          | 1,767.8774        | 1,767.8774        | 0.0591        | 0.2548        | 1,845.2712        |
| Worker       | 1.2040        | 0.8790        | 13.6966        | 0.0356        | 3.8898        | 0.0249        | 3.9147        | 1.0316         | 0.0229        | 1.0545        |          | 3,596.3779        | 3,596.3779        | 0.0980        | 0.0871        | 3,624.7772        |
| <b>Total</b> | <b>1.3884</b> | <b>5.6812</b> | <b>15.2677</b> | <b>0.0546</b> | <b>4.4995</b> | <b>0.0692</b> | <b>4.5687</b> | <b>1.2062</b>  | <b>0.0653</b> | <b>1.2715</b> |          | <b>5,642.9353</b> | <b>5,642.9353</b> | <b>0.1719</b> | <b>0.3861</b> | <b>5,762.2749</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.8555        | 14.6040        | 14.3533        | 0.0250        |               | 0.7022        | 0.7022        |                | 0.6731        | 0.6731        | 0.0000        | 2,289.2813        | 2,289.2813        | 0.4417        |     | 2,300.3230        |
| <b>Total</b> | <b>1.8555</b> | <b>14.6040</b> | <b>14.3533</b> | <b>0.0250</b> |               | <b>0.7022</b> | <b>0.7022</b> |                | <b>0.6731</b> | <b>0.6731</b> | <b>0.0000</b> | <b>2,289.2813</b> | <b>2,289.2813</b> | <b>0.4417</b> |     | <b>2,300.3230</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2022**

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0191        | 0.6875        | 0.1603         | 2.5400e-003   | 0.0717        | 5.1100e-003   | 0.0768        | 0.0196         | 4.8900e-003   | 0.0245        |          | 278.6801          | 278.6801          | 0.0148        | 0.0442        | 292.2265          |
| Vendor       | 0.1653        | 4.1147        | 1.4108         | 0.0165        | 0.5381        | 0.0392        | 0.5772        | 0.1549         | 0.0375        | 0.1924        |          | 1,767.8774        | 1,767.8774        | 0.0591        | 0.2548        | 1,845.2712        |
| Worker       | 1.2040        | 0.8790        | 13.6966        | 0.0356        | 3.8898        | 0.0249        | 3.9147        | 1.0316         | 0.0229        | 1.0545        |          | 3,596.3779        | 3,596.3779        | 0.0980        | 0.0871        | 3,624.7772        |
| <b>Total</b> | <b>1.3884</b> | <b>5.6812</b> | <b>15.2677</b> | <b>0.0546</b> | <b>4.4995</b> | <b>0.0692</b> | <b>4.5687</b> | <b>1.2062</b>  | <b>0.0653</b> | <b>1.2715</b> |          | <b>5,642.9353</b> | <b>5,642.9353</b> | <b>0.1719</b> | <b>0.3861</b> | <b>5,762.2749</b> |

**3.5 Building Construction - 2023**

Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.7136        | 13.6239        | 14.2145        | 0.0250        |               | 0.6136        | 0.6136        |                | 0.5880        | 0.5880        |          | 2,289.5233        | 2,289.5233        | 0.4330        |     | 2,300.3479        |
| <b>Total</b> | <b>1.7136</b> | <b>13.6239</b> | <b>14.2145</b> | <b>0.0250</b> |               | <b>0.6136</b> | <b>0.6136</b> |                | <b>0.5880</b> | <b>0.5880</b> |          | <b>2,289.5233</b> | <b>2,289.5233</b> | <b>0.4330</b> |     | <b>2,300.3479</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.8800e-003   | 0.5342        | 0.1426         | 2.3900e-003   | 0.0717        | 3.3700e-003   | 0.0750        | 0.0197         | 3.2200e-003   | 0.0229        |          | 263.0772          | 263.0772          | 0.0145        | 0.0418        | 275.8890          |
| Vendor       | 0.0967        | 3.2242        | 1.2491         | 0.0156        | 0.5381        | 0.0162        | 0.5543        | 0.1549         | 0.0155        | 0.1704        |          | 1,682.3728        | 1,682.3728        | 0.0564        | 0.2419        | 1,755.8613        |
| Worker       | 1.1137        | 0.7764        | 12.5767        | 0.0344        | 3.8898        | 0.0234        | 3.9132        | 1.0316         | 0.0215        | 1.0531        |          | 3,480.2623        | 3,480.2623        | 0.0878        | 0.0803        | 3,506.3904        |
| <b>Total</b> | <b>1.2193</b> | <b>4.5348</b> | <b>13.9683</b> | <b>0.0525</b> | <b>4.4995</b> | <b>0.0430</b> | <b>4.5425</b> | <b>1.2062</b>  | <b>0.0403</b> | <b>1.2464</b> |          | <b>5,425.7123</b> | <b>5,425.7123</b> | <b>0.1586</b> | <b>0.3640</b> | <b>5,538.1407</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.7136        | 13.6239        | 14.2145        | 0.0250        |               | 0.6136        | 0.6136        |                | 0.5880        | 0.5880        | 0.0000        | 2,289.5233        | 2,289.5233        | 0.4330        |     | 2,300.3479        |
| <b>Total</b> | <b>1.7136</b> | <b>13.6239</b> | <b>14.2145</b> | <b>0.0250</b> |               | <b>0.6136</b> | <b>0.6136</b> |                | <b>0.5880</b> | <b>0.5880</b> | <b>0.0000</b> | <b>2,289.5233</b> | <b>2,289.5233</b> | <b>0.4330</b> |     | <b>2,300.3479</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.8800e-003   | 0.5342        | 0.1426         | 2.3900e-003   | 0.0717        | 3.3700e-003   | 0.0750        | 0.0197         | 3.2200e-003   | 0.0229        |          | 263.0772          | 263.0772          | 0.0145        | 0.0418        | 275.8890          |
| Vendor       | 0.0967        | 3.2242        | 1.2491         | 0.0156        | 0.5381        | 0.0162        | 0.5543        | 0.1549         | 0.0155        | 0.1704        |          | 1,682.3728        | 1,682.3728        | 0.0564        | 0.2419        | 1,755.8613        |
| Worker       | 1.1137        | 0.7764        | 12.5767        | 0.0344        | 3.8898        | 0.0234        | 3.9132        | 1.0316         | 0.0215        | 1.0531        |          | 3,480.2623        | 3,480.2623        | 0.0878        | 0.0803        | 3,506.3904        |
| <b>Total</b> | <b>1.2193</b> | <b>4.5348</b> | <b>13.9683</b> | <b>0.0525</b> | <b>4.4995</b> | <b>0.0430</b> | <b>4.5425</b> | <b>1.2062</b>  | <b>0.0403</b> | <b>1.2464</b> |          | <b>5,425.7123</b> | <b>5,425.7123</b> | <b>0.1586</b> | <b>0.3640</b> | <b>5,538.1407</b> |

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5971        | 12.8235        | 14.1002        | 0.0250        |               | 0.5381        | 0.5381        |                | 0.5153        | 0.5153        |          | 2,289.6541        | 2,289.6541        | 0.4265        |     | 2,300.3154        |
| <b>Total</b> | <b>1.5971</b> | <b>12.8235</b> | <b>14.1002</b> | <b>0.0250</b> |               | <b>0.5381</b> | <b>0.5381</b> |                | <b>0.5153</b> | <b>0.5153</b> |          | <b>2,289.6541</b> | <b>2,289.6541</b> | <b>0.4265</b> |     | <b>2,300.3154</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.8200e-003   | 0.5355        | 0.1451         | 2.3600e-003   | 0.0717        | 3.4000e-003   | 0.0751        | 0.0197         | 3.2500e-003   | 0.0229        |          | 259.3518          | 259.3518          | 0.0146        | 0.0412        | 271.9952          |
| Vendor       | 0.0938        | 3.2308        | 1.2225         | 0.0154        | 0.5381        | 0.0163        | 0.5544        | 0.1549         | 0.0156        | 0.1705        |          | 1,657.1067        | 1,657.1067        | 0.0566        | 0.2385        | 1,729.5936        |
| Worker       | 1.0376        | 0.6930        | 11.6867        | 0.0335        | 3.8898        | 0.0224        | 3.9122        | 1.0316         | 0.0206        | 1.0522        |          | 3,381.6207        | 3,381.6207        | 0.0794        | 0.0747        | 3,405.8637        |
| <b>Total</b> | <b>1.1402</b> | <b>4.4593</b> | <b>13.0543</b> | <b>0.0512</b> | <b>4.4995</b> | <b>0.0421</b> | <b>4.5417</b> | <b>1.2062</b>  | <b>0.0395</b> | <b>1.2457</b> |          | <b>5,298.0792</b> | <b>5,298.0792</b> | <b>0.1506</b> | <b>0.3544</b> | <b>5,407.4525</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.5971        | 12.8235        | 14.1002        | 0.0250        |               | 0.5381        | 0.5381        |                | 0.5153        | 0.5153        | 0.0000        | 2,289.6541        | 2,289.6541        | 0.4265        |     | 2,300.3154        |
| <b>Total</b> | <b>1.5971</b> | <b>12.8235</b> | <b>14.1002</b> | <b>0.0250</b> |               | <b>0.5381</b> | <b>0.5381</b> |                | <b>0.5153</b> | <b>0.5153</b> | <b>0.0000</b> | <b>2,289.6541</b> | <b>2,289.6541</b> | <b>0.4265</b> |     | <b>2,300.3154</b> |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.8200e-003   | 0.5355        | 0.1451         | 2.3600e-003   | 0.0717        | 3.4000e-003   | 0.0751        | 0.0197         | 3.2500e-003   | 0.0229        |          | 259.3518          | 259.3518          | 0.0146        | 0.0412        | 271.9952          |
| Vendor       | 0.0938        | 3.2308        | 1.2225         | 0.0154        | 0.5381        | 0.0163        | 0.5544        | 0.1549         | 0.0156        | 0.1705        |          | 1,657.1067        | 1,657.1067        | 0.0566        | 0.2385        | 1,729.5936        |
| Worker       | 1.0376        | 0.6930        | 11.6867        | 0.0335        | 3.8898        | 0.0224        | 3.9122        | 1.0316         | 0.0206        | 1.0522        |          | 3,381.6207        | 3,381.6207        | 0.0794        | 0.0747        | 3,405.8637        |
| <b>Total</b> | <b>1.1402</b> | <b>4.4593</b> | <b>13.0543</b> | <b>0.0512</b> | <b>4.4995</b> | <b>0.0421</b> | <b>4.5417</b> | <b>1.2062</b>  | <b>0.0395</b> | <b>1.2457</b> |          | <b>5,298.0792</b> | <b>5,298.0792</b> | <b>0.1506</b> | <b>0.3544</b> | <b>5,407.4525</b> |

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.8425        | 8.1030        | 11.7069        | 0.0179        |               | 0.3957        | 0.3957        |                | 0.3652        | 0.3652        |          | 1,710.2024        | 1,710.2024        | 0.5420        |     | 1,723.7529        |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>0.8425</b> | <b>8.1030</b> | <b>11.7069</b> | <b>0.0179</b> |               | <b>0.3957</b> | <b>0.3957</b> |                | <b>0.3652</b> | <b>0.3652</b> |          | <b>1,710.2024</b> | <b>1,710.2024</b> | <b>0.5420</b> |     | <b>1,723.7529</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0477        | 0.0319        | 0.5373        | 1.5400e-003        | 0.1788        | 1.0300e-003        | 0.1799        | 0.0474         | 9.5000e-004        | 0.0484        |          | 155.4768        | 155.4768        | 3.6500e-003        | 3.4300e-003        | 156.5914        |
| <b>Total</b> | <b>0.0477</b> | <b>0.0319</b> | <b>0.5373</b> | <b>1.5400e-003</b> | <b>0.1788</b> | <b>1.0300e-003</b> | <b>0.1799</b> | <b>0.0474</b>  | <b>9.5000e-004</b> | <b>0.0484</b> |          | <b>155.4768</b> | <b>155.4768</b> | <b>3.6500e-003</b> | <b>3.4300e-003</b> | <b>156.5914</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.8425        | 8.1030        | 11.7069        | 0.0179        |               | 0.3957        | 0.3957        |                | 0.3652        | 0.3652        | 0.0000        | 1,710.2024        | 1,710.2024        | 0.5420        |     | 1,723.7529        |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>0.8425</b> | <b>8.1030</b> | <b>11.7069</b> | <b>0.0179</b> |               | <b>0.3957</b> | <b>0.3957</b> |                | <b>0.3652</b> | <b>0.3652</b> | <b>0.0000</b> | <b>1,710.2024</b> | <b>1,710.2024</b> | <b>0.5420</b> |     | <b>1,723.7529</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0477        | 0.0319        | 0.5373        | 1.5400e-003        | 0.1788        | 1.0300e-003        | 0.1799        | 0.0474         | 9.5000e-004        | 0.0484        |          | 155.4768        | 155.4768        | 3.6500e-003        | 3.4300e-003        | 156.5914        |
| <b>Total</b> | <b>0.0477</b> | <b>0.0319</b> | <b>0.5373</b> | <b>1.5400e-003</b> | <b>0.1788</b> | <b>1.0300e-003</b> | <b>0.1799</b> | <b>0.0474</b>  | <b>9.5000e-004</b> | <b>0.0484</b> |          | <b>155.4768</b> | <b>155.4768</b> | <b>3.6500e-003</b> | <b>3.4300e-003</b> | <b>156.5914</b> |

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 28.3086        |               |               |                    |               | 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        |          | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>28.4894</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>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.2087        | 0.1394        | 2.3508        | 6.7300e-003        | 0.7824        | 4.5100e-003        | 0.7869        | 0.2075         | 4.1500e-003        | 0.2117        |          | 680.2111        | 680.2111        | 0.0160        | 0.0150        | 685.0875        |
| <b>Total</b> | <b>0.2087</b> | <b>0.1394</b> | <b>2.3508</b> | <b>6.7300e-003</b> | <b>0.7824</b> | <b>4.5100e-003</b> | <b>0.7869</b> | <b>0.2075</b>  | <b>4.1500e-003</b> | <b>0.2117</b> |          | <b>680.2111</b> | <b>680.2111</b> | <b>0.0160</b> | <b>0.0150</b> | <b>685.0875</b> |

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 28.3086        |               |               |                    |               | 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        | 0.0000        | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>28.4894</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>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.2087        | 0.1394        | 2.3508        | 6.7300e-003        | 0.7824        | 4.5100e-003        | 0.7869        | 0.2075         | 4.1500e-003        | 0.2117        |          | 680.2111        | 680.2111        | 0.0160        | 0.0150        | 685.0875        |
| <b>Total</b> | <b>0.2087</b> | <b>0.1394</b> | <b>2.3508</b> | <b>6.7300e-003</b> | <b>0.7824</b> | <b>4.5100e-003</b> | <b>0.7869</b> | <b>0.2075</b>  | <b>4.1500e-003</b> | <b>0.2117</b> |          | <b>680.2111</b> | <b>680.2111</b> | <b>0.0160</b> | <b>0.0150</b> | <b>685.0875</b> |

**4.0 Operational Detail - Mobile**

**4.1 Mitigation Measures Mobile**

Increase Density

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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        |
|-------------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category    | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| Mitigated   | 6.9953 | 6.6200 | 65.6817 | 0.1416 | 14.7147       | 0.1020       | 14.8167    | 3.9196         | 0.0947        | 4.0143      |          | 14,436.6542 | 14,436.6542 | 0.9931 | 0.6058 | 14,642.0003 |
| Unmitigated | 7.3631 | 7.1804 | 71.6770 | 0.1569 | 16.3497       | 0.1122       | 16.4619    | 4.3551         | 0.1042        | 4.4592      |          | 15,999.2536 | 15,999.2536 | 1.0726 | 0.6570 | 16,221.8473 |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| Apartments Mid Rise                 | 1,691.84                | 1,527.01        | 1271.99         | 5,495,854        | 4,946,269        |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| Fast Food Restaurant w/o Drive Thru | 75.86                   | 152.48          | 109.55          | 165,918          | 149,326          |
| Health Club                         | 0.00                    | 0.00            | 0.00            |                  |                  |
| Other Non-Asphalt Surfaces          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Recreational Swimming Pool          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Regional Shopping Center            | 646.48                  | 789.85          | 361.39          | 1,354,446        | 1,219,001        |
| <b>Total</b>                        | <b>2,414.17</b>         | <b>2,469.35</b> | <b>1,742.93</b> | <b>7,016,218</b> | <b>6,314,596</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 Mid Rise            | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86             | 11       | 3       |
| Enclosed Parking with Elevator | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 16.60      | 8.40       | 6.90        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Health Club                    | 16.60      | 8.40       | 6.90        | 16.90      | 64.10      | 19.00       | 52             | 39       | 9       |
| Other Non-Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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 |
| Recreational Swimming Pool | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 52             | 39       | 9       |
| Regional Shopping Center   | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54             | 35       | 11      |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Enclosed Parking with Elevator      | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Fast Food Restaurant w/o Drive Thru | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Health Club                         | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Other Non-Asphalt Surfaces          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Recreational Swimming Pool          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Regional Shopping Center            | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Kilowatt Hours of Renewable Electricity Generated

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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       |
|-------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category                | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |            |            |        |        |            |
| Natural Gas Mitigated   | 0.1350 | 1.1621 | 0.5509 | 7.3700e-003 |               | 0.0933       | 0.0933     |                | 0.0933        | 0.0933      |          | 1,473.1393 | 1,473.1393 | 0.0282 | 0.0270 | 1,481.8934 |
| Natural Gas Unmitigated | 0.1350 | 1.1621 | 0.5509 | 7.3700e-003 |               | 0.0933       | 0.0933     |                | 0.0933        | 0.0933      |          | 1,473.1393 | 1,473.1393 | 0.0282 | 0.0270 | 1,481.8934 |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use                            | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Apartments Mid Rise                 | 11133.5        | 0.1201        | 1.0260        | 0.4366        | 6.5500e-003        |               | 0.0830        | 0.0830        |                | 0.0830        | 0.0830        |          | 1,309.8177        | 1,309.8177        | 0.0251        | 0.0240        | 1,317.6013        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 473.281        | 5.1000e-003   | 0.0464        | 0.0390        | 2.8000e-004        |               | 3.5300e-003   | 3.5300e-003   |                | 3.5300e-003   | 3.5300e-003   |          | 55.6801           | 55.6801           | 1.0700e-003   | 1.0200e-003   | 56.0110           |
| Health Club                         | 847.318        | 9.1400e-003   | 0.0831        | 0.0698        | 5.0000e-004        |               | 6.3100e-003   | 6.3100e-003   |                | 6.3100e-003   | 6.3100e-003   |          | 99.6845           | 99.6845           | 1.9100e-003   | 1.8300e-003   | 100.2769          |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Regional Shopping Center            | 67.6338        | 7.3000e-004   | 6.6300e-003   | 5.5700e-003   | 4.0000e-005        |               | 5.0000e-004   | 5.0000e-004   |                | 5.0000e-004   | 5.0000e-004   |          | 7.9569            | 7.9569            | 1.5000e-004   | 1.5000e-004   | 8.0042            |
| <b>Total</b>                        |                | <b>0.1350</b> | <b>1.1621</b> | <b>0.5509</b> | <b>7.3700e-003</b> |               | <b>0.0933</b> | <b>0.0933</b> |                | <b>0.0933</b> | <b>0.0933</b> |          | <b>1,473.1393</b> | <b>1,473.1393</b> | <b>0.0282</b> | <b>0.0270</b> | <b>1,481.8934</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use                            | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Apartments Mid Rise                 | 11.1335        | 0.1201        | 1.0260        | 0.4366        | 6.5500e-003        |               | 0.0830        | 0.0830        |                | 0.0830        | 0.0830        |          | 1,309.8177        | 1,309.8177        | 0.0251        | 0.0240        | 1,317.6013        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 0.473281       | 5.1000e-003   | 0.0464        | 0.0390        | 2.8000e-004        |               | 3.5300e-003   | 3.5300e-003   |                | 3.5300e-003   | 3.5300e-003   |          | 55.6801           | 55.6801           | 1.0700e-003   | 1.0200e-003   | 56.0110           |
| Health Club                         | 0.847318       | 9.1400e-003   | 0.0831        | 0.0698        | 5.0000e-004        |               | 6.3100e-003   | 6.3100e-003   |                | 6.3100e-003   | 6.3100e-003   |          | 99.6845           | 99.6845           | 1.9100e-003   | 1.8300e-003   | 100.2769          |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Regional Shopping Center            | 0.0676338      | 7.3000e-004   | 6.6300e-003   | 5.5700e-003   | 4.0000e-005        |               | 5.0000e-004   | 5.0000e-004   |                | 5.0000e-004   | 5.0000e-004   |          | 7.9569            | 7.9569            | 1.5000e-004   | 1.5000e-004   | 8.0042            |
| <b>Total</b>                        |                | <b>0.1350</b> | <b>1.1621</b> | <b>0.5509</b> | <b>7.3700e-003</b> |               | <b>0.0933</b> | <b>0.0933</b> |                | <b>0.0933</b> | <b>0.0933</b> |          | <b>1,473.1393</b> | <b>1,473.1393</b> | <b>0.0282</b> | <b>0.0270</b> | <b>1,481.8934</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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       |
|-------------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category    | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |        |            |
| Mitigated   | 8.8501 | 4.6812 | 27.5775 | 0.0294 |               | 0.4969       | 0.4969     |                | 0.4969        | 0.4969      | 0.0000   | 5,644.3381 | 5,644.3381 | 0.1520 | 0.1026 | 5,678.7215 |
| Unmitigated | 8.8501 | 4.6812 | 27.5775 | 0.0294 |               | 0.4969       | 0.4969     |                | 0.4969        | 0.4969      | 0.0000   | 5,644.3381 | 5,644.3381 | 0.1520 | 0.1026 | 5,678.7215 |

**6.2 Area by SubCategory**

Unmitigated

|                       | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-----------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory           | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |               |                   |
| Architectural Coating | 0.6391        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Consumer Products     | 6.9208        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Hearth                | 0.5132        | 4.3851        | 1.8660         | 0.0280        |               | 0.3545        | 0.3545        |                | 0.3545        | 0.3545        | 0.0000        | 5,598.0000        | 5,598.0000        | 0.1073        | 0.1026        | 5,631.2661        |
| Landscaping           | 0.7771        | 0.2961        | 25.7115        | 1.3600e-003   |               | 0.1424        | 0.1424        |                | 0.1424        | 0.1424        |               | 46.3381           | 46.3381           | 0.0447        |               | 47.4553           |
| <b>Total</b>          | <b>8.8501</b> | <b>4.6812</b> | <b>27.5775</b> | <b>0.0294</b> |               | <b>0.4969</b> | <b>0.4969</b> |                | <b>0.4969</b> | <b>0.4969</b> | <b>0.0000</b> | <b>5,644.3381</b> | <b>5,644.3381</b> | <b>0.1520</b> | <b>0.1026</b> | <b>5,678.7215</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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

|                       | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-----------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory           | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |               |                   |
| Architectural Coating | 0.6391        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Consumer Products     | 6.9208        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Hearth                | 0.5132        | 4.3851        | 1.8660         | 0.0280        |               | 0.3545        | 0.3545        |                | 0.3545        | 0.3545        | 0.0000        | 5,598.0000        | 5,598.0000        | 0.1073        | 0.1026        | 5,631.2661        |
| Landscaping           | 0.7771        | 0.2961        | 25.7115        | 1.3600e-003   |               | 0.1424        | 0.1424        |                | 0.1424        | 0.1424        |               | 46.3381           | 46.3381           | 0.0447        |               | 47.4553           |
| <b>Total</b>          | <b>8.8501</b> | <b>4.6812</b> | <b>27.5775</b> | <b>0.0294</b> |               | <b>0.4969</b> | <b>0.4969</b> |                | <b>0.4969</b> | <b>0.4969</b> | <b>0.0000</b> | <b>5,644.3381</b> | <b>5,644.3381</b> | <b>0.1520</b> | <b>0.1026</b> | <b>5,678.7215</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Summer

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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| 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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Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**Alexan Arcadia EIR Alternative Analysis**

**Los Angeles-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

| Land Uses                           | Size   | Metric        | Lot Acreage | Floor Surface Area | Population |
|-------------------------------------|--------|---------------|-------------|--------------------|------------|
| Enclosed Parking with Elevator      | 551.00 | Space         | 1.24        | 220,400.00         | 0          |
| Other Non-Asphalt Surfaces          | 41.35  | 1000sqft      | 0.95        | 41,350.00          | 0          |
| Fast Food Restaurant w/o Drive Thru | 0.75   | 1000sqft      | 0.02        | 750.00             | 0          |
| Health Club                         | 17.22  | 1000sqft      | 0.00        | 17,220.00          | 0          |
| Recreational Swimming Pool          | 6.67   | 1000sqft      | 0.00        | 6,670.00           | 0          |
| Apartments Mid Rise                 | 311.00 | Dwelling Unit | 0.00        | 311,000.00         | 889        |
| Regional Shopping Center            | 15.14  | 1000sqft      | 0.35        | 15,145.00          | 0          |

**1.2 Other Project Characteristics**

|                                 |                            |                                 |       |                                  |       |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>             | Urban                      | <b>Wind Speed (m/s)</b>         | 2.2   | <b>Precipitation Freq (Days)</b> | 33    |
| <b>Climate Zone</b>             | 9                          |                                 |       | <b>Operational Year</b>          | 2024  |
| <b>Utility Company</b>          | Southern California Edison |                                 |       |                                  |       |
| <b>CO2 Intensity (lb/MW hr)</b> | 390.98                     | <b>CH4 Intensity (lb/MW hr)</b> | 0.033 | <b>N2O Intensity (lb/MW hr)</b>  | 0.004 |

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

Project Characteristics - Alternative operational analysis only. Change live-work to commercial space.

Land Use - Lot acre = ground lvl land use = 2.95 gross site area. SF Based on prelim design study. For Alternative live-work area changed to commercial/retail.

Health Club = Fitness and Game Room and common rooms. Fast food = cafe.

Construction Phase - Building construction schedule provided by applicant.

Off-road Equipment - Default values

Off-road Equipment - Default values

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

Off-road Equipment - Default values

Off-road Equipment - Default values + 1 excavator added for excavation of subterranean parking, applicant confirmed.

Off-road Equipment - Default values

Off-road Equipment - Default values

Trips and VMT - Rounded trips to even values. Grading haul trips provided by applicant includes excavation.

Demolition - Removal of 94,815 sqft of paved surface and demolition of 17,324 sqft of existing buildings

Grading - Per applicant provided information for materials, graded area default values.

Architectural Coating - No-VOC coatings will be used for the proeject pre applicant. 5 g/L assumed.

Vehicle Trips - Based on TIA. General Office Building based on TIA traffic data for Live-Work spaces.

Woodstoves - No woodstoves or wood fireplaces.

Area Coating - No-VOC paint per applicant. 5 g/L assumed.

Energy Use - Default values

Water And Wastewater - Default values.

Solid Waste - Default values.

Construction Off-road Equipment Mitigation -

Mobile Land Use Mitigation -

Area Mitigation - No-VOC paint per applicant

Energy Mitigation - Applicant provided information for onsite solar energy.

Water Mitigation -

Fleet Mix -

| Table Name              | Column Name                       | Default Value | New Value |
|-------------------------|-----------------------------------|---------------|-----------|
| tblArchitecturalCoating | ConstArea_Nonresidential_Exterior | 16,927.00     | 16,929.00 |
| tblArchitecturalCoating | ConstArea_Nonresidential_Interior | 50,780.00     | 50,786.00 |
| tblArchitecturalCoating | EF_Nonresidential_Exterior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Nonresidential_Interior        | 100.00        | 5.00      |
| tblArchitecturalCoating | EF_Residential_Exterior           | 50.00         | 5.00      |
| tblArchitecturalCoating | EF_Residential_Interior           | 50.00         | 5.00      |
| tblAreaCoating          | Area_Nonresidential_Exterior      | 16927         | 16929     |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

|                      |                              |           |           |
|----------------------|------------------------------|-----------|-----------|
| tblAreaCoating       | Area_Nonresidential_Interior | 50780     | 50786     |
| tblConstructionPhase | NumDays                      | 220.00    | 513.00    |
| tblConstructionPhase | NumDays                      | 6.00      | 15.00     |
| tblFireplaces        | FireplaceWoodMass            | 1,019.20  | 0.00      |
| tblFireplaces        | NumberWood                   | 15.55     | 0.00      |
| tblGrading           | MaterialExported             | 0.00      | 52,000.00 |
| tblGrading           | MaterialImported             | 0.00      | 520.00    |
| tblLandUse           | LandUseSquareFeet            | 15,140.00 | 15,145.00 |
| tblLandUse           | LotAcreage                   | 4.96      | 1.24      |
| tblLandUse           | LotAcreage                   | 0.40      | 0.00      |
| tblLandUse           | LotAcreage                   | 0.15      | 0.00      |
| tblLandUse           | LotAcreage                   | 8.18      | 0.00      |
| tblTripsAndVMT       | HaulingTripNumber            | 0.00      | 2,100.00  |
| tblTripsAndVMT       | VendorTripNumber             | 83.00     | 84.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 14.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 13.00     | 10.00     |
| tblTripsAndVMT       | WorkerTripNumber             | 349.00    | 348.00    |
| tblTripsAndVMT       | WorkerTripNumber             | 15.00     | 16.00     |
| tblVehicleTrips      | ST_TR                        | 696.00    | 203.31    |
| tblVehicleTrips      | ST_TR                        | 20.87     | 0.00      |
| tblVehicleTrips      | ST_TR                        | 9.10      | 0.00      |
| tblVehicleTrips      | ST_TR                        | 46.12     | 52.17     |
| tblVehicleTrips      | SU_TR                        | 500.00    | 146.06    |
| tblVehicleTrips      | SU_TR                        | 26.73     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 13.60     | 0.00      |
| tblVehicleTrips      | SU_TR                        | 21.10     | 23.87     |
| tblVehicleTrips      | WD_TR                        | 346.23    | 101.14    |
| tblVehicleTrips      | WD_TR                        | 32.93     | 0.00      |
| tblVehicleTrips      | WD_TR                        | 28.82     | 0.00      |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

|                 |                    |        |       |
|-----------------|--------------------|--------|-------|
| tblVehicleTrips | WD_TR              | 37.75  | 42.70 |
| tblWoodstoves   | NumberCatalytic    | 15.55  | 0.00  |
| tblWoodstoves   | NumberNoncatalytic | 15.55  | 0.00  |
| tblWoodstoves   | WoodstoveDayYear   | 25.00  | 0.00  |
| tblWoodstoves   | WoodstoveWoodMass  | 999.60 | 0.00  |

**2.0 Emissions Summary**

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Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|                | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Year           | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| 2022           | 3.7502         | 94.5197        | 30.1044        | 0.2961        | 15.1713        | 1.3707        | 16.5421        | 5.5933         | 1.2810        | 6.8743        | 0.0000        | 32,102.30<br>18         | 32,102.30<br>18         | 2.3742        | 4.6848        | 33,557.72<br>76         |
| 2023           | 3.0119         | 18.4150        | 27.2074        | 0.0757        | 4.4995         | 0.6567        | 5.1562         | 1.2062         | 0.6284        | 1.8346        | 0.0000        | 7,534.878<br>9          | 7,534.878<br>9          | 0.5925        | 0.3701        | 7,659.992<br>0          |
| 2024           | 31.5285        | 25.6687        | 38.4612        | 0.0938        | 5.2820         | 0.9770        | 5.9277         | 1.4137         | 0.9210        | 2.1746        | 0.0000        | 9,270.392<br>0          | 9,270.392<br>0          | 1.1237        | 0.3762        | 9,406.893<br>5          |
| <b>Maximum</b> | <b>31.5285</b> | <b>94.5197</b> | <b>38.4612</b> | <b>0.2961</b> | <b>15.1713</b> | <b>1.3707</b> | <b>16.5421</b> | <b>5.5933</b>  | <b>1.2810</b> | <b>6.8743</b> | <b>0.0000</b> | <b>32,102.30<br/>18</b> | <b>32,102.30<br/>18</b> | <b>2.3742</b> | <b>4.6848</b> | <b>33,557.72<br/>76</b> |

**Mitigated Construction**

|                | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|----------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Year           | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| 2022           | 3.7502         | 94.5197        | 30.1044        | 0.2961        | 11.0603        | 1.3707        | 12.4310        | 3.6770         | 1.2810        | 4.9580        | 0.0000        | 32,102.30<br>18         | 32,102.30<br>18         | 2.3742        | 4.6848        | 33,557.72<br>76         |
| 2023           | 3.0119         | 18.4150        | 27.2074        | 0.0757        | 4.4995         | 0.6567        | 5.1562         | 1.2062         | 0.6284        | 1.8346        | 0.0000        | 7,534.878<br>9          | 7,534.878<br>9          | 0.5925        | 0.3701        | 7,659.992<br>0          |
| 2024           | 31.5285        | 25.6687        | 38.4612        | 0.0938        | 5.2820         | 0.9770        | 5.9277         | 1.4137         | 0.9210        | 2.1746        | 0.0000        | 9,270.392<br>0          | 9,270.392<br>0          | 1.1237        | 0.3762        | 9,406.893<br>5          |
| <b>Maximum</b> | <b>31.5285</b> | <b>94.5197</b> | <b>38.4612</b> | <b>0.2961</b> | <b>11.0603</b> | <b>1.3707</b> | <b>12.4310</b> | <b>3.6770</b>  | <b>1.2810</b> | <b>4.9580</b> | <b>0.0000</b> | <b>32,102.30<br/>18</b> | <b>32,102.30<br/>18</b> | <b>2.3742</b> | <b>4.6848</b> | <b>33,557.72<br/>76</b> |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| Area         | 8.8501         | 4.6812         | 27.5775        | 0.0294        |                | 0.4969        | 0.4969         |                | 0.4969        | 0.4969        | 0.0000        | 5,644.338<br>1          | 5,644.338<br>1          | 0.1520        | 0.1026        | 5,678.721<br>5          |
| Energy       | 0.1350         | 1.1621         | 0.5509         | 7.3700e-003   |                | 0.0933        | 0.0933         |                | 0.0933        | 0.0933        |               | 1,473.139<br>3          | 1,473.139<br>3          | 0.0282        | 0.0270        | 1,481.893<br>4          |
| Mobile       | 7.2196         | 7.7541         | 70.4182        | 0.1503        | 16.3497        | 0.1123        | 16.4619        | 4.3551         | 0.1042        | 4.4593        |               | 15,324.45<br>25         | 15,324.45<br>25         | 1.1061        | 0.6862        | 15,556.60<br>12         |
| <b>Total</b> | <b>16.2048</b> | <b>13.5974</b> | <b>98.5466</b> | <b>0.1870</b> | <b>16.3497</b> | <b>0.7025</b> | <b>17.0522</b> | <b>4.3551</b>  | <b>0.6945</b> | <b>5.0495</b> | <b>0.0000</b> | <b>22,441.92<br/>98</b> | <b>22,441.92<br/>98</b> | <b>1.2863</b> | <b>0.8159</b> | <b>22,717.21<br/>60</b> |

**Mitigated Operational**

|              | ROG            | NOx            | CO             | SO2           | Fugitive PM10  | Exhaust PM10  | PM10 Total     | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2               | Total CO2               | CH4           | N2O           | CO2e                    |
|--------------|----------------|----------------|----------------|---------------|----------------|---------------|----------------|----------------|---------------|---------------|---------------|-------------------------|-------------------------|---------------|---------------|-------------------------|
| Category     | lb/day         |                |                |               |                |               |                |                |               |               | lb/day        |                         |                         |               |               |                         |
| Area         | 8.8501         | 4.6812         | 27.5775        | 0.0294        |                | 0.4969        | 0.4969         |                | 0.4969        | 0.4969        | 0.0000        | 5,644.338<br>1          | 5,644.338<br>1          | 0.1520        | 0.1026        | 5,678.721<br>5          |
| Energy       | 0.1350         | 1.1621         | 0.5509         | 7.3700e-003   |                | 0.0933        | 0.0933         |                | 0.0933        | 0.0933        |               | 1,473.139<br>3          | 1,473.139<br>3          | 0.0282        | 0.0270        | 1,481.893<br>4          |
| Mobile       | 6.8484         | 7.1493         | 64.7760        | 0.1356        | 14.7147        | 0.1021        | 14.8168        | 3.9196         | 0.0948        | 4.0143        |               | 13,829.89<br>50         | 13,829.89<br>50         | 1.0269        | 0.6330        | 14,044.20<br>10         |
| <b>Total</b> | <b>15.8336</b> | <b>12.9926</b> | <b>92.9044</b> | <b>0.1723</b> | <b>14.7147</b> | <b>0.6923</b> | <b>15.4070</b> | <b>3.9196</b>  | <b>0.6850</b> | <b>4.6045</b> | <b>0.0000</b> | <b>20,947.37<br/>23</b> | <b>20,947.37<br/>23</b> | <b>1.2071</b> | <b>0.7626</b> | <b>21,204.81<br/>59</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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 | 2.29 | 4.45 | 5.73 | 7.84 | 10.00         | 1.45         | 9.65       | 10.00          | 1.37          | 8.81        | 0.00     | 6.66     | 6.66      | 6.15 | 6.52 | 6.66 |

**3.0 Construction Detail**

**Construction Phase**

| Phase Number | Phase Name            | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Demolition            | Demolition            | 7/1/2022   | 7/28/2022 | 5             | 20       |                   |
| 2            | Site Preparation      | Site Preparation      | 7/29/2022  | 8/2/2022  | 5             | 3        |                   |
| 3            | Grading               | Grading               | 8/3/2022   | 8/23/2022 | 5             | 15       |                   |
| 4            | Building Construction | Building Construction | 8/24/2022  | 8/11/2024 | 5             | 513      |                   |
| 5            | Paving                | Paving                | 6/15/2024  | 6/28/2024 | 5             | 10       |                   |
| 6            | Architectural Coating | Architectural Coating | 6/29/2024  | 7/12/2024 | 5             | 10       |                   |

**Acres of Grading (Site Preparation Phase): 4.5**

**Acres of Grading (Grading Phase): 15**

**Acres of Paving: 2.19**

**Residential Indoor: 629,775; Residential Outdoor: 209,925; Non-Residential Indoor: 50,786; Non-Residential Outdoor: 16,929; Striped Parking Area: 15,705 (Architectural Coating – sqft)**

**OffRoad Equipment**

| Phase Name       | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|------------------|---------------------------|--------|-------------|-------------|-------------|
| Demolition       | Concrete/Industrial Saws  | 1      | 8.00        | 81          | 0.73        |
| Demolition       | Rubber Tired Dozers       | 1      | 8.00        | 247         | 0.40        |
| Demolition       | Tractors/Loaders/Backhoes | 3      | 8.00        | 97          | 0.37        |
| Site Preparation | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Site Preparation | Scrapers                  | 1      | 8.00        | 367         | 0.48        |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

|                       |                           |   |      |     |      |
|-----------------------|---------------------------|---|------|-----|------|
| Site Preparation      | Tractors/Loaders/Backhoes | 1 | 7.00 | 97  | 0.37 |
| Grading               | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Grading               | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Grading               | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading               | Tractors/Loaders/Backhoes | 2 | 7.00 | 97  | 0.37 |
| Building Construction | Cranes                    | 1 | 8.00 | 231 | 0.29 |
| Building Construction | Forklifts                 | 2 | 7.00 | 89  | 0.20 |
| Building Construction | Generator Sets            | 1 | 8.00 | 84  | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 1 | 6.00 | 97  | 0.37 |
| Building Construction | Welders                   | 3 | 8.00 | 46  | 0.45 |
| Paving                | Cement and Mortar Mixers  | 1 | 8.00 | 9   | 0.56 |
| Paving                | Pavers                    | 1 | 8.00 | 130 | 0.42 |
| Paving                | Paving Equipment          | 1 | 8.00 | 132 | 0.36 |
| Paving                | Rollers                   | 2 | 8.00 | 80  | 0.38 |
| Paving                | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Architectural Coating | Air Compressors           | 1 | 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 |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition            | 5                       | 14.00              | 0.00               | 485.00              | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation      | 3                       | 8.00               | 0.00               | 65.00               | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading               | 5                       | 10.00              | 0.00               | 6,500.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Building Construction | 8                       | 348.00             | 84.00              | 2,100.00            | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Paving                | 6                       | 16.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Architectural Coating | 1                       | 70.00              | 0.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

Water Exposed Area

**3.2 Demolition - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 5.2498        | 0.0000        | 5.2498        | 0.7949         | 0.0000        | 0.7949        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.6889        | 16.6217        | 13.9605        | 0.0241        |               | 0.8379        | 0.8379        |                | 0.7829        | 0.7829        |          | 2,323.4168        | 2,323.4168        | 0.5921        |     | 2,338.2191        |
| <b>Total</b>  | <b>1.6889</b> | <b>16.6217</b> | <b>13.9605</b> | <b>0.0241</b> | <b>5.2498</b> | <b>0.8379</b> | <b>6.0877</b> | <b>0.7949</b>  | <b>0.7829</b> | <b>1.5778</b> |          | <b>2,323.4168</b> | <b>2,323.4168</b> | <b>0.5921</b> |     | <b>2,338.2191</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1103        | 4.2380        | 0.9663        | 0.0151        | 0.4245        | 0.0303        | 0.4548        | 0.1164         | 0.0290        | 0.1454        |          | 1,651.3648        | 1,651.3648        | 0.0875        | 0.2620        | 1,731.6349        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0519        | 0.0391        | 0.5059        | 1.3600e-003   | 0.1565        | 1.0000e-003   | 0.1575        | 0.0415         | 9.2000e-004   | 0.0424        |          | 137.0324          | 137.0324          | 3.9900e-003   | 3.7400e-003   | 138.2477          |
| <b>Total</b> | <b>0.1621</b> | <b>4.2771</b> | <b>1.4722</b> | <b>0.0164</b> | <b>0.5810</b> | <b>0.0313</b> | <b>0.6123</b> | <b>0.1579</b>  | <b>0.0299</b> | <b>0.1878</b> |          | <b>1,788.3972</b> | <b>1,788.3972</b> | <b>0.0915</b> | <b>0.2658</b> | <b>1,869.8826</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 2.3624        | 0.0000        | 2.3624        | 0.3577         | 0.0000        | 0.3577        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.6889        | 16.6217        | 13.9605        | 0.0241        |               | 0.8379        | 0.8379        |                | 0.7829        | 0.7829        | 0.0000        | 2,323.4168        | 2,323.4168        | 0.5921        |     | 2,338.2191        |
| <b>Total</b>  | <b>1.6889</b> | <b>16.6217</b> | <b>13.9605</b> | <b>0.0241</b> | <b>2.3624</b> | <b>0.8379</b> | <b>3.2003</b> | <b>0.3577</b>  | <b>0.7829</b> | <b>1.1406</b> | <b>0.0000</b> | <b>2,323.4168</b> | <b>2,323.4168</b> | <b>0.5921</b> |     | <b>2,338.2191</b> |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.1103        | 4.2380        | 0.9663        | 0.0151        | 0.4245        | 0.0303        | 0.4548        | 0.1164         | 0.0290        | 0.1454        |          | 1,651.3648        | 1,651.3648        | 0.0875        | 0.2620        | 1,731.6349        |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Worker       | 0.0519        | 0.0391        | 0.5059        | 1.3600e-003   | 0.1565        | 1.0000e-003   | 0.1575        | 0.0415         | 9.2000e-004   | 0.0424        |          | 137.0324          | 137.0324          | 3.9900e-003   | 3.7400e-003   | 138.2477          |
| <b>Total</b> | <b>0.1621</b> | <b>4.2771</b> | <b>1.4722</b> | <b>0.0164</b> | <b>0.5810</b> | <b>0.0313</b> | <b>0.6123</b> | <b>0.1579</b>  | <b>0.0299</b> | <b>0.1878</b> |          | <b>1,788.3972</b> | <b>1,788.3972</b> | <b>0.0915</b> | <b>0.2658</b> | <b>1,869.8826</b> |

**3.3 Site Preparation - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 1.6104        | 0.0000        | 1.6104        | 0.1747         | 0.0000        | 0.1747        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.3784        | 15.6673        | 10.0558        | 0.0245        |               | 0.5952        | 0.5952        |                | 0.5476        | 0.5476        |          | 2,375.1569        | 2,375.1569        | 0.7682        |     | 2,394.3613        |
| <b>Total</b>  | <b>1.3784</b> | <b>15.6673</b> | <b>10.0558</b> | <b>0.0245</b> | <b>1.6104</b> | <b>0.5952</b> | <b>2.2055</b> | <b>0.1747</b>  | <b>0.5476</b> | <b>0.7223</b> |          | <b>2,375.1569</b> | <b>2,375.1569</b> | <b>0.7682</b> |     | <b>2,394.3613</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0985        | 3.7866        | 0.8634        | 0.0135        | 0.3793        | 0.0271        | 0.4063        | 0.1040         | 0.0259        | 0.1299        |          | 1,475.446<br>2         | 1,475.446<br>2         | 0.0782        | 0.2341        | 1,547.165<br>2         |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Worker       | 0.0296        | 0.0223        | 0.2891        | 7.7000e-004   | 0.0894        | 5.7000e-004   | 0.0900        | 0.0237         | 5.3000e-004   | 0.0242        |          | 78.3043                | 78.3043                | 2.2800e-003   | 2.1400e-003   | 78.9987                |
| <b>Total</b> | <b>0.1282</b> | <b>3.8089</b> | <b>1.1525</b> | <b>0.0142</b> | <b>0.4687</b> | <b>0.0277</b> | <b>0.4963</b> | <b>0.1277</b>  | <b>0.0265</b> | <b>0.1541</b> |          | <b>1,553.750<br/>4</b> | <b>1,553.750<br/>4</b> | <b>0.0805</b> | <b>0.2363</b> | <b>1,626.163<br/>9</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 0.7247        | 0.0000        | 0.7247        | 0.0786         | 0.0000        | 0.0786        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 1.3784        | 15.6673        | 10.0558        | 0.0245        |               | 0.5952        | 0.5952        |                | 0.5476        | 0.5476        | 0.0000        | 2,375.156<br>9         | 2,375.156<br>9         | 0.7682        |     | 2,394.361<br>3         |
| <b>Total</b>  | <b>1.3784</b> | <b>15.6673</b> | <b>10.0558</b> | <b>0.0245</b> | <b>0.7247</b> | <b>0.5952</b> | <b>1.3198</b> | <b>0.0786</b>  | <b>0.5476</b> | <b>0.6262</b> | <b>0.0000</b> | <b>2,375.156<br/>9</b> | <b>2,375.156<br/>9</b> | <b>0.7682</b> |     | <b>2,394.361<br/>3</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O           | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|---------------|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |               |                        |
| Hauling      | 0.0985        | 3.7866        | 0.8634        | 0.0135        | 0.3793        | 0.0271        | 0.4063        | 0.1040         | 0.0259        | 0.1299        |          | 1,475.446<br>2         | 1,475.446<br>2         | 0.0782        | 0.2341        | 1,547.165<br>2         |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000                 | 0.0000                 | 0.0000        | 0.0000        | 0.0000                 |
| Worker       | 0.0296        | 0.0223        | 0.2891        | 7.7000e-004   | 0.0894        | 5.7000e-004   | 0.0900        | 0.0237         | 5.3000e-004   | 0.0242        |          | 78.3043                | 78.3043                | 2.2800e-003   | 2.1400e-003   | 78.9987                |
| <b>Total</b> | <b>0.1282</b> | <b>3.8089</b> | <b>1.1525</b> | <b>0.0142</b> | <b>0.4687</b> | <b>0.0277</b> | <b>0.4963</b> | <b>0.1277</b>  | <b>0.0265</b> | <b>0.1541</b> |          | <b>1,553.750<br/>4</b> | <b>1,553.750<br/>4</b> | <b>0.0805</b> | <b>0.2363</b> | <b>1,626.163<br/>9</b> |

**3.4 Grading - 2022**

**Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Fugitive Dust |               |                |                |               | 7.4746        | 0.0000        | 7.4746        | 3.4841         | 0.0000        | 3.4841        |          |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 1.7428        | 18.7606        | 12.4753        | 0.0258        |               | 0.8282        | 0.8282        |                | 0.7619        | 0.7619        |          | 2,495.497<br>7         | 2,495.497<br>7         | 0.8071        |     | 2,515.675<br>1         |
| <b>Total</b>  | <b>1.7428</b> | <b>18.7606</b> | <b>12.4753</b> | <b>0.0258</b> | <b>7.4746</b> | <b>0.8282</b> | <b>8.3028</b> | <b>3.4841</b>  | <b>0.7619</b> | <b>4.2460</b> |          | <b>2,495.497<br/>7</b> | <b>2,495.497<br/>7</b> | <b>0.8071</b> |     | <b>2,515.675<br/>1</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Hauling      | 1.9704        | 75.7312        | 17.2678        | 0.2694        | 7.5849        | 0.5418        | 8.1268        | 2.0796         | 0.5184        | 2.5979        |          | 29,508.9238        | 29,508.9238        | 1.5643        | 4.6821        | 30,943.3041        |
| Vendor       | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Worker       | 0.0370        | 0.0279         | 0.3614         | 9.7000e-004   | 0.1118        | 7.2000e-004   | 0.1125        | 0.0296         | 6.6000e-004   | 0.0303        |          | 97.8803            | 97.8803            | 2.8500e-003   | 2.6700e-003   | 98.7483            |
| <b>Total</b> | <b>2.0074</b> | <b>75.7591</b> | <b>17.6291</b> | <b>0.2704</b> | <b>7.6967</b> | <b>0.5425</b> | <b>8.2392</b> | <b>2.1092</b>  | <b>0.5190</b> | <b>2.6282</b> |          | <b>29,606.8041</b> | <b>29,606.8041</b> | <b>1.5671</b> | <b>4.6848</b> | <b>31,042.0525</b> |

**Mitigated Construction On-Site**

|               | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |                |               | 3.3636        | 0.0000        | 3.3636        | 1.5679         | 0.0000        | 1.5679        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.7428        | 18.7606        | 12.4753        | 0.0258        |               | 0.8282        | 0.8282        |                | 0.7619        | 0.7619        | 0.0000        | 2,495.4977        | 2,495.4977        | 0.8071        |     | 2,515.6751        |
| <b>Total</b>  | <b>1.7428</b> | <b>18.7606</b> | <b>12.4753</b> | <b>0.0258</b> | <b>3.3636</b> | <b>0.8282</b> | <b>4.1918</b> | <b>1.5679</b>  | <b>0.7619</b> | <b>2.3298</b> | <b>0.0000</b> | <b>2,495.4977</b> | <b>2,495.4977</b> | <b>0.8071</b> |     | <b>2,515.6751</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Hauling      | 1.9704        | 75.7312        | 17.2678        | 0.2694        | 7.5849        | 0.5418        | 8.1268        | 2.0796         | 0.5184        | 2.5979        |          | 29,508.9238        | 29,508.9238        | 1.5643        | 4.6821        | 30,943.3041        |
| Vendor       | 0.0000        | 0.0000         | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Worker       | 0.0370        | 0.0279         | 0.3614         | 9.7000e-004   | 0.1118        | 7.2000e-004   | 0.1125        | 0.0296         | 6.6000e-004   | 0.0303        |          | 97.8803            | 97.8803            | 2.8500e-003   | 2.6700e-003   | 98.7483            |
| <b>Total</b> | <b>2.0074</b> | <b>75.7591</b> | <b>17.6291</b> | <b>0.2704</b> | <b>7.6967</b> | <b>0.5425</b> | <b>8.2392</b> | <b>2.1092</b>  | <b>0.5190</b> | <b>2.6282</b> |          | <b>29,606.8041</b> | <b>29,606.8041</b> | <b>1.5671</b> | <b>4.6848</b> | <b>31,042.0525</b> |

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.8555        | 14.6040        | 14.3533        | 0.0250        |               | 0.7022        | 0.7022        |                | 0.6731        | 0.6731        |          | 2,289.2813        | 2,289.2813        | 0.4417        |     | 2,300.3230        |
| <b>Total</b> | <b>1.8555</b> | <b>14.6040</b> | <b>14.3533</b> | <b>0.0250</b> |               | <b>0.7022</b> | <b>0.7022</b> |                | <b>0.6731</b> | <b>0.6731</b> |          | <b>2,289.2813</b> | <b>2,289.2813</b> | <b>0.4417</b> |     | <b>2,300.3230</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2022**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0186        | 0.7154        | 0.1631         | 2.5400e-003   | 0.0717        | 5.1200e-003   | 0.0768        | 0.0196         | 4.9000e-003   | 0.0245        |          | 278.7618          | 278.7618          | 0.0148        | 0.0442        | 292.3119          |
| Vendor       | 0.1633        | 4.2843        | 1.4595         | 0.0165        | 0.5381        | 0.0393        | 0.5774        | 0.1549         | 0.0376        | 0.1926        |          | 1,768.5416        | 1,768.5416        | 0.0589        | 0.2551        | 1,846.0285        |
| Worker       | 1.2890        | 0.9712        | 12.5756        | 0.0337        | 3.8898        | 0.0249        | 3.9147        | 1.0316         | 0.0229        | 1.0545        |          | 3,406.2350        | 3,406.2350        | 0.0992        | 0.0931        | 3,436.4424        |
| <b>Total</b> | <b>1.4709</b> | <b>5.9709</b> | <b>14.1982</b> | <b>0.0527</b> | <b>4.4995</b> | <b>0.0694</b> | <b>4.5689</b> | <b>1.2062</b>  | <b>0.0654</b> | <b>1.2716</b> |          | <b>5,453.5384</b> | <b>5,453.5384</b> | <b>0.1728</b> | <b>0.3924</b> | <b>5,574.7828</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.8555        | 14.6040        | 14.3533        | 0.0250        |               | 0.7022        | 0.7022        |                | 0.6731        | 0.6731        | 0.0000        | 2,289.2813        | 2,289.2813        | 0.4417        |     | 2,300.3230        |
| <b>Total</b> | <b>1.8555</b> | <b>14.6040</b> | <b>14.3533</b> | <b>0.0250</b> |               | <b>0.7022</b> | <b>0.7022</b> |                | <b>0.6731</b> | <b>0.6731</b> | <b>0.0000</b> | <b>2,289.2813</b> | <b>2,289.2813</b> | <b>0.4417</b> |     | <b>2,300.3230</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2022**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 0.0186        | 0.7154        | 0.1631         | 2.5400e-003   | 0.0717        | 5.1200e-003   | 0.0768        | 0.0196         | 4.9000e-003   | 0.0245        |          | 278.7618          | 278.7618          | 0.0148        | 0.0442        | 292.3119          |
| Vendor       | 0.1633        | 4.2843        | 1.4595         | 0.0165        | 0.5381        | 0.0393        | 0.5774        | 0.1549         | 0.0376        | 0.1926        |          | 1,768.5416        | 1,768.5416        | 0.0589        | 0.2551        | 1,846.0285        |
| Worker       | 1.2890        | 0.9712        | 12.5756        | 0.0337        | 3.8898        | 0.0249        | 3.9147        | 1.0316         | 0.0229        | 1.0545        |          | 3,406.2350        | 3,406.2350        | 0.0992        | 0.0931        | 3,436.4424        |
| <b>Total</b> | <b>1.4709</b> | <b>5.9709</b> | <b>14.1982</b> | <b>0.0527</b> | <b>4.4995</b> | <b>0.0694</b> | <b>4.5689</b> | <b>1.2062</b>  | <b>0.0654</b> | <b>1.2716</b> |          | <b>5,453.5384</b> | <b>5,453.5384</b> | <b>0.1728</b> | <b>0.3924</b> | <b>5,574.7828</b> |

**3.5 Building Construction - 2023**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.7136        | 13.6239        | 14.2145        | 0.0250        |               | 0.6136        | 0.6136        |                | 0.5880        | 0.5880        |          | 2,289.5233        | 2,289.5233        | 0.4330        |     | 2,300.3479        |
| <b>Total</b> | <b>1.7136</b> | <b>13.6239</b> | <b>14.2145</b> | <b>0.0250</b> |               | <b>0.6136</b> | <b>0.6136</b> |                | <b>0.5880</b> | <b>0.5880</b> |          | <b>2,289.5233</b> | <b>2,289.5233</b> | <b>0.4330</b> |     | <b>2,300.3479</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2023**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.3100e-003   | 0.5577        | 0.1445         | 2.4000e-003   | 0.0717        | 3.3800e-003   | 0.0750        | 0.0197         | 3.2300e-003   | 0.0229        |          | 263.3545          | 263.3545          | 0.0145        | 0.0418        | 276.1790          |
| Vendor       | 0.0934        | 3.3757        | 1.2883         | 0.0157        | 0.5381        | 0.0163        | 0.5544        | 0.1549         | 0.0156        | 0.1705        |          | 1,685.2106        | 1,685.2106        | 0.0561        | 0.2425        | 1,758.8853        |
| Worker       | 1.1966        | 0.8576        | 11.5601        | 0.0326        | 3.8898        | 0.0234        | 3.9132        | 1.0316         | 0.0215        | 1.0531        |          | 3,296.7905        | 3,296.7905        | 0.0890        | 0.0858        | 3,324.5798        |
| <b>Total</b> | <b>1.2983</b> | <b>4.7910</b> | <b>12.9929</b> | <b>0.0507</b> | <b>4.4995</b> | <b>0.0431</b> | <b>4.5426</b> | <b>1.2062</b>  | <b>0.0404</b> | <b>1.2466</b> |          | <b>5,245.3556</b> | <b>5,245.3556</b> | <b>0.1596</b> | <b>0.3701</b> | <b>5,359.6441</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.7136        | 13.6239        | 14.2145        | 0.0250        |               | 0.6136        | 0.6136        |                | 0.5880        | 0.5880        | 0.0000        | 2,289.5233        | 2,289.5233        | 0.4330        |     | 2,300.3479        |
| <b>Total</b> | <b>1.7136</b> | <b>13.6239</b> | <b>14.2145</b> | <b>0.0250</b> |               | <b>0.6136</b> | <b>0.6136</b> |                | <b>0.5880</b> | <b>0.5880</b> | <b>0.0000</b> | <b>2,289.5233</b> | <b>2,289.5233</b> | <b>0.4330</b> |     | <b>2,300.3479</b> |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2023**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.3100e-003   | 0.5577        | 0.1445         | 2.4000e-003   | 0.0717        | 3.3800e-003   | 0.0750        | 0.0197         | 3.2300e-003   | 0.0229        |          | 263.3545          | 263.3545          | 0.0145        | 0.0418        | 276.1790          |
| Vendor       | 0.0934        | 3.3757        | 1.2883         | 0.0157        | 0.5381        | 0.0163        | 0.5544        | 0.1549         | 0.0156        | 0.1705        |          | 1,685.2106        | 1,685.2106        | 0.0561        | 0.2425        | 1,758.8853        |
| Worker       | 1.1966        | 0.8576        | 11.5601        | 0.0326        | 3.8898        | 0.0234        | 3.9132        | 1.0316         | 0.0215        | 1.0531        |          | 3,296.7905        | 3,296.7905        | 0.0890        | 0.0858        | 3,324.5798        |
| <b>Total</b> | <b>1.2983</b> | <b>4.7910</b> | <b>12.9929</b> | <b>0.0507</b> | <b>4.4995</b> | <b>0.0431</b> | <b>4.5426</b> | <b>1.2062</b>  | <b>0.0404</b> | <b>1.2466</b> |          | <b>5,245.3556</b> | <b>5,245.3556</b> | <b>0.1596</b> | <b>0.3701</b> | <b>5,359.6441</b> |

**3.5 Building Construction - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 1.5971        | 12.8235        | 14.1002        | 0.0250        |               | 0.5381        | 0.5381        |                | 0.5153        | 0.5153        |          | 2,289.6541        | 2,289.6541        | 0.4265        |     | 2,300.3154        |
| <b>Total</b> | <b>1.5971</b> | <b>12.8235</b> | <b>14.1002</b> | <b>0.0250</b> |               | <b>0.5381</b> | <b>0.5381</b> |                | <b>0.5153</b> | <b>0.5153</b> |          | <b>2,289.6541</b> | <b>2,289.6541</b> | <b>0.4265</b> |     | <b>2,300.3154</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.2500e-003   | 0.5592        | 0.1470         | 2.3600e-003   | 0.0717        | 3.4000e-003   | 0.0751        | 0.0197         | 3.2600e-003   | 0.0229        |          | 259.6290          | 259.6290          | 0.0146        | 0.0413        | 272.2850          |
| Vendor       | 0.0903        | 3.3826        | 1.2613         | 0.0154        | 0.5381        | 0.0164        | 0.5545        | 0.1549         | 0.0157        | 0.1706        |          | 1,659.9604        | 1,659.9604        | 0.0563        | 0.2391        | 1,732.6280        |
| Worker       | 1.1185        | 0.7653        | 10.7515        | 0.0317        | 3.8898        | 0.0224        | 3.9122        | 1.0316         | 0.0206        | 1.0522        |          | 3,203.6518        | 3,203.6518        | 0.0806        | 0.0798        | 3,229.4326        |
| <b>Total</b> | <b>1.2170</b> | <b>4.7071</b> | <b>12.1598</b> | <b>0.0495</b> | <b>4.4995</b> | <b>0.0422</b> | <b>4.5418</b> | <b>1.2062</b>  | <b>0.0396</b> | <b>1.2458</b> |          | <b>5,123.2412</b> | <b>5,123.2412</b> | <b>0.1515</b> | <b>0.3601</b> | <b>5,234.3456</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 1.5971        | 12.8235        | 14.1002        | 0.0250        |               | 0.5381        | 0.5381        |                | 0.5153        | 0.5153        | 0.0000        | 2,289.6541        | 2,289.6541        | 0.4265        |     | 2,300.3154        |
| <b>Total</b> | <b>1.5971</b> | <b>12.8235</b> | <b>14.1002</b> | <b>0.0250</b> |               | <b>0.5381</b> | <b>0.5381</b> |                | <b>0.5153</b> | <b>0.5153</b> | <b>0.0000</b> | <b>2,289.6541</b> | <b>2,289.6541</b> | <b>0.4265</b> |     | <b>2,300.3154</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.5 Building Construction - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Hauling      | 8.2500e-003   | 0.5592        | 0.1470         | 2.3600e-003   | 0.0717        | 3.4000e-003   | 0.0751        | 0.0197         | 3.2600e-003   | 0.0229        |          | 259.6290          | 259.6290          | 0.0146        | 0.0413        | 272.2850          |
| Vendor       | 0.0903        | 3.3826        | 1.2613         | 0.0154        | 0.5381        | 0.0164        | 0.5545        | 0.1549         | 0.0157        | 0.1706        |          | 1,659.9604        | 1,659.9604        | 0.0563        | 0.2391        | 1,732.6280        |
| Worker       | 1.1185        | 0.7653        | 10.7515        | 0.0317        | 3.8898        | 0.0224        | 3.9122        | 1.0316         | 0.0206        | 1.0522        |          | 3,203.6518        | 3,203.6518        | 0.0806        | 0.0798        | 3,229.4326        |
| <b>Total</b> | <b>1.2170</b> | <b>4.7071</b> | <b>12.1598</b> | <b>0.0495</b> | <b>4.4995</b> | <b>0.0422</b> | <b>4.5418</b> | <b>1.2062</b>  | <b>0.0396</b> | <b>1.2458</b> |          | <b>5,123.2412</b> | <b>5,123.2412</b> | <b>0.1515</b> | <b>0.3601</b> | <b>5,234.3456</b> |

**3.6 Paving - 2024**

**Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.8425        | 8.1030        | 11.7069        | 0.0179        |               | 0.3957        | 0.3957        |                | 0.3652        | 0.3652        |          | 1,710.2024        | 1,710.2024        | 0.5420        |     | 1,723.7529        |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>0.8425</b> | <b>8.1030</b> | <b>11.7069</b> | <b>0.0179</b> |               | <b>0.3957</b> | <b>0.3957</b> |                | <b>0.3652</b> | <b>0.3652</b> |          | <b>1,710.2024</b> | <b>1,710.2024</b> | <b>0.5420</b> |     | <b>1,723.7529</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.6 Paving - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0514        | 0.0352        | 0.4943        | 1.4600e-003        | 0.1788        | 1.0300e-003        | 0.1799        | 0.0474         | 9.5000e-004        | 0.0484        |          | 147.2943        | 147.2943        | 3.7000e-003        | 3.6700e-003        | 148.4797        |
| <b>Total</b> | <b>0.0514</b> | <b>0.0352</b> | <b>0.4943</b> | <b>1.4600e-003</b> | <b>0.1788</b> | <b>1.0300e-003</b> | <b>0.1799</b> | <b>0.0474</b>  | <b>9.5000e-004</b> | <b>0.0484</b> |          | <b>147.2943</b> | <b>147.2943</b> | <b>3.7000e-003</b> | <b>3.6700e-003</b> | <b>148.4797</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.8425        | 8.1030        | 11.7069        | 0.0179        |               | 0.3957        | 0.3957        |                | 0.3652        | 0.3652        | 0.0000        | 1,710.2024        | 1,710.2024        | 0.5420        |     | 1,723.7529        |
| Paving       | 0.0000        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |     | 0.0000            |
| <b>Total</b> | <b>0.8425</b> | <b>8.1030</b> | <b>11.7069</b> | <b>0.0179</b> |               | <b>0.3957</b> | <b>0.3957</b> |                | <b>0.3652</b> | <b>0.3652</b> | <b>0.0000</b> | <b>1,710.2024</b> | <b>1,710.2024</b> | <b>0.5420</b> |     | <b>1,723.7529</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.6 Paving - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O                | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|--------------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |                    |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000             | 0.0000          |
| Worker       | 0.0514        | 0.0352        | 0.4943        | 1.4600e-003        | 0.1788        | 1.0300e-003        | 0.1799        | 0.0474         | 9.5000e-004        | 0.0484        |          | 147.2943        | 147.2943        | 3.7000e-003        | 3.6700e-003        | 148.4797        |
| <b>Total</b> | <b>0.0514</b> | <b>0.0352</b> | <b>0.4943</b> | <b>1.4600e-003</b> | <b>0.1788</b> | <b>1.0300e-003</b> | <b>0.1799</b> | <b>0.0474</b>  | <b>9.5000e-004</b> | <b>0.0484</b> |          | <b>147.2943</b> | <b>147.2943</b> | <b>3.7000e-003</b> | <b>3.6700e-003</b> | <b>148.4797</b> |

**3.7 Architectural Coating - 2024**

**Unmitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Archit. Coating | 28.3086        |               |               |                    |               | 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        |          | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>28.4894</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>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.7 Architectural Coating - 2024**

**Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.2250        | 0.1539        | 2.1627        | 6.3800e-003        | 0.7824        | 4.5100e-003        | 0.7869        | 0.2075         | 4.1500e-003        | 0.2117        |          | 644.4127        | 644.4127        | 0.0162        | 0.0160        | 649.5985        |
| <b>Total</b> | <b>0.2250</b> | <b>0.1539</b> | <b>2.1627</b> | <b>6.3800e-003</b> | <b>0.7824</b> | <b>4.5100e-003</b> | <b>0.7869</b> | <b>0.2075</b>  | <b>4.1500e-003</b> | <b>0.2117</b> |          | <b>644.4127</b> | <b>644.4127</b> | <b>0.0162</b> | <b>0.0160</b> | <b>649.5985</b> |

**Mitigated Construction On-Site**

|                 | ROG            | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|-----------------|----------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category        | lb/day         |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Archit. Coating | 28.3086        |               |               |                    |               | 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        | 0.0000        | 281.4481        | 281.4481        | 0.0159        |     | 281.8443        |
| <b>Total</b>    | <b>28.4894</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>0.0000</b> | <b>281.4481</b> | <b>281.4481</b> | <b>0.0159</b> |     | <b>281.8443</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**3.7 Architectural Coating - 2024**

**Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Worker       | 0.2250        | 0.1539        | 2.1627        | 6.3800e-003        | 0.7824        | 4.5100e-003        | 0.7869        | 0.2075         | 4.1500e-003        | 0.2117        |          | 644.4127        | 644.4127        | 0.0162        | 0.0160        | 649.5985        |
| <b>Total</b> | <b>0.2250</b> | <b>0.1539</b> | <b>2.1627</b> | <b>6.3800e-003</b> | <b>0.7824</b> | <b>4.5100e-003</b> | <b>0.7869</b> | <b>0.2075</b>  | <b>4.1500e-003</b> | <b>0.2117</b> |          | <b>644.4127</b> | <b>644.4127</b> | <b>0.0162</b> | <b>0.0160</b> | <b>649.5985</b> |

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Increase Density

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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        |
|-------------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category    | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |             |             |        |        |             |
| Mitigated   | 6.8484 | 7.1493 | 64.7760 | 0.1356 | 14.7147       | 0.1021       | 14.8168    | 3.9196         | 0.0948        | 4.0143      |          | 13,829.8950 | 13,829.8950 | 1.0269 | 0.6330 | 14,044.2010 |
| Unmitigated | 7.2196 | 7.7541 | 70.4182 | 0.1503 | 16.3497       | 0.1123       | 16.4619    | 4.3551         | 0.1042        | 4.4593      |          | 15,324.4525 | 15,324.4525 | 1.1061 | 0.6862 | 15,556.6012 |

**4.2 Trip Summary Information**

| Land Use                            | Average Daily Trip Rate |                 |                 | Unmitigated      | Mitigated        |
|-------------------------------------|-------------------------|-----------------|-----------------|------------------|------------------|
|                                     | Weekday                 | Saturday        | Sunday          | Annual VMT       | Annual VMT       |
| Apartments Mid Rise                 | 1,691.84                | 1,527.01        | 1271.99         | 5,495,854        | 4,946,269        |
| Enclosed Parking with Elevator      | 0.00                    | 0.00            | 0.00            |                  |                  |
| Fast Food Restaurant w/o Drive Thru | 75.86                   | 152.48          | 109.55          | 165,918          | 149,326          |
| Health Club                         | 0.00                    | 0.00            | 0.00            |                  |                  |
| Other Non-Asphalt Surfaces          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Recreational Swimming Pool          | 0.00                    | 0.00            | 0.00            |                  |                  |
| Regional Shopping Center            | 646.48                  | 789.85          | 361.39          | 1,354,446        | 1,219,001        |
| <b>Total</b>                        | <b>2,414.17</b>         | <b>2,469.35</b> | <b>1,742.93</b> | <b>7,016,218</b> | <b>6,314,596</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 Mid Rise            | 14.70      | 5.90       | 8.70        | 40.20      | 19.20      | 40.60       | 86             | 11       | 3       |
| Enclosed Parking with Elevator | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |
| Fast Food Restaurant w/o Drive | 16.60      | 8.40       | 6.90        | 1.50       | 79.50      | 19.00       | 51             | 37       | 12      |
| Health Club                    | 16.60      | 8.40       | 6.90        | 16.90      | 64.10      | 19.00       | 52             | 39       | 9       |
| Other Non-Asphalt Surfaces     | 16.60      | 8.40       | 6.90        | 0.00       | 0.00       | 0.00        | 0              | 0        | 0       |



Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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 |
| Recreational Swimming Pool | 16.60      | 8.40       | 6.90        | 33.00      | 48.00      | 19.00       | 52             | 39       | 9       |
| Regional Shopping Center   | 16.60      | 8.40       | 6.90        | 16.30      | 64.70      | 19.00       | 54             | 35       | 11      |

**4.4 Fleet Mix**

| Land Use                            | LDA      | LDT1     | LDT2     | MDV      | LHD1     | LHD2     | MHD      | HHD      | OBUS     | UBUS     | MCY      | SBUS     | MH       |
|-------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Apartments Mid Rise                 | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Enclosed Parking with Elevator      | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Fast Food Restaurant w/o Drive Thru | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Health Club                         | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Other Non-Asphalt Surfaces          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Recreational Swimming Pool          | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |
| Regional Shopping Center            | 0.542464 | 0.063735 | 0.188241 | 0.126899 | 0.023249 | 0.006239 | 0.010717 | 0.008079 | 0.000923 | 0.000604 | 0.024795 | 0.000702 | 0.003352 |

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Kilowatt Hours of Renewable Electricity Generated

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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       |
|-------------------------|--------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category                | lb/day |        |        |             |               |              |            |                |               |             | lb/day   |            |            |        |        |            |
| Natural Gas Mitigated   | 0.1350 | 1.1621 | 0.5509 | 7.3700e-003 |               | 0.0933       | 0.0933     |                | 0.0933        | 0.0933      |          | 1,473.1393 | 1,473.1393 | 0.0282 | 0.0270 | 1,481.8934 |
| Natural Gas Unmitigated | 0.1350 | 1.1621 | 0.5509 | 7.3700e-003 |               | 0.0933       | 0.0933     |                | 0.0933        | 0.0933      |          | 1,473.1393 | 1,473.1393 | 0.0282 | 0.0270 | 1,481.8934 |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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**

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use                            | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Apartments Mid Rise                 | 11133.5        | 0.1201        | 1.0260        | 0.4366        | 6.5500e-003        |               | 0.0830        | 0.0830        |                | 0.0830        | 0.0830        |          | 1,309.8177        | 1,309.8177        | 0.0251        | 0.0240        | 1,317.6013        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 473.281        | 5.1000e-003   | 0.0464        | 0.0390        | 2.8000e-004        |               | 3.5300e-003   | 3.5300e-003   |                | 3.5300e-003   | 3.5300e-003   |          | 55.6801           | 55.6801           | 1.0700e-003   | 1.0200e-003   | 56.0110           |
| Health Club                         | 847.318        | 9.1400e-003   | 0.0831        | 0.0698        | 5.0000e-004        |               | 6.3100e-003   | 6.3100e-003   |                | 6.3100e-003   | 6.3100e-003   |          | 99.6845           | 99.6845           | 1.9100e-003   | 1.8300e-003   | 100.2769          |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Regional Shopping Center            | 67.6338        | 7.3000e-004   | 6.6300e-003   | 5.5700e-003   | 4.0000e-005        |               | 5.0000e-004   | 5.0000e-004   |                | 5.0000e-004   | 5.0000e-004   |          | 7.9569            | 7.9569            | 1.5000e-004   | 1.5000e-004   | 8.0042            |
| <b>Total</b>                        |                | <b>0.1350</b> | <b>1.1621</b> | <b>0.5509</b> | <b>7.3700e-003</b> |               | <b>0.0933</b> | <b>0.0933</b> |                | <b>0.0933</b> | <b>0.0933</b> |          | <b>1,473.1393</b> | <b>1,473.1393</b> | <b>0.0282</b> | <b>0.0270</b> | <b>1,481.8934</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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

|                                     | NaturalGas Use | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-------------------------------------|----------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|---------------|-------------------|
| Land Use                            | kBTU/yr        | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                   |                   |               |               |                   |
| Apartments Mid Rise                 | 11.1335        | 0.1201        | 1.0260        | 0.4366        | 6.5500e-003        |               | 0.0830        | 0.0830        |                | 0.0830        | 0.0830        |          | 1,309.8177        | 1,309.8177        | 0.0251        | 0.0240        | 1,317.6013        |
| Enclosed Parking with Elevator      | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Fast Food Restaurant w/o Drive Thru | 0.473281       | 5.1000e-003   | 0.0464        | 0.0390        | 2.8000e-004        |               | 3.5300e-003   | 3.5300e-003   |                | 3.5300e-003   | 3.5300e-003   |          | 55.6801           | 55.6801           | 1.0700e-003   | 1.0200e-003   | 56.0110           |
| Health Club                         | 0.847318       | 9.1400e-003   | 0.0831        | 0.0698        | 5.0000e-004        |               | 6.3100e-003   | 6.3100e-003   |                | 6.3100e-003   | 6.3100e-003   |          | 99.6845           | 99.6845           | 1.9100e-003   | 1.8300e-003   | 100.2769          |
| Other Non-Asphalt Surfaces          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Recreational Swimming Pool          | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000             |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000            | 0.0000            | 0.0000        | 0.0000        | 0.0000            |
| Regional Shopping Center            | 0.0676338      | 7.3000e-004   | 6.6300e-003   | 5.5700e-003   | 4.0000e-005        |               | 5.0000e-004   | 5.0000e-004   |                | 5.0000e-004   | 5.0000e-004   |          | 7.9569            | 7.9569            | 1.5000e-004   | 1.5000e-004   | 8.0042            |
| <b>Total</b>                        |                | <b>0.1350</b> | <b>1.1621</b> | <b>0.5509</b> | <b>7.3700e-003</b> |               | <b>0.0933</b> | <b>0.0933</b> |                | <b>0.0933</b> | <b>0.0933</b> |          | <b>1,473.1393</b> | <b>1,473.1393</b> | <b>0.0282</b> | <b>0.0270</b> | <b>1,481.8934</b> |

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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       |
|-------------|--------|--------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|------------|------------|--------|--------|------------|
| Category    | lb/day |        |         |        |               |              |            |                |               |             | lb/day   |            |            |        |        |            |
| Mitigated   | 8.8501 | 4.6812 | 27.5775 | 0.0294 |               | 0.4969       | 0.4969     |                | 0.4969        | 0.4969      | 0.0000   | 5,644.3381 | 5,644.3381 | 0.1520 | 0.1026 | 5,678.7215 |
| Unmitigated | 8.8501 | 4.6812 | 27.5775 | 0.0294 |               | 0.4969       | 0.4969     |                | 0.4969        | 0.4969      | 0.0000   | 5,644.3381 | 5,644.3381 | 0.1520 | 0.1026 | 5,678.7215 |

**6.2 Area by SubCategory**

Unmitigated

|                       | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-----------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory           | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |               |                   |
| Architectural Coating | 0.6391        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Consumer Products     | 6.9208        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Hearth                | 0.5132        | 4.3851        | 1.8660         | 0.0280        |               | 0.3545        | 0.3545        |                | 0.3545        | 0.3545        | 0.0000        | 5,598.0000        | 5,598.0000        | 0.1073        | 0.1026        | 5,631.2661        |
| Landscaping           | 0.7771        | 0.2961        | 25.7115        | 1.3600e-003   |               | 0.1424        | 0.1424        |                | 0.1424        | 0.1424        |               | 46.3381           | 46.3381           | 0.0447        |               | 47.4553           |
| <b>Total</b>          | <b>8.8501</b> | <b>4.6812</b> | <b>27.5775</b> | <b>0.0294</b> |               | <b>0.4969</b> | <b>0.4969</b> |                | <b>0.4969</b> | <b>0.4969</b> | <b>0.0000</b> | <b>5,644.3381</b> | <b>5,644.3381</b> | <b>0.1520</b> | <b>0.1026</b> | <b>5,678.7215</b> |

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, 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

|                       | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O           | CO2e              |
|-----------------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|---------------|-------------------|
| SubCategory           | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |               |                   |
| Architectural Coating | 0.6391        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Consumer Products     | 6.9208        |               |                |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |               |                   | 0.0000            |               |               | 0.0000            |
| Hearth                | 0.5132        | 4.3851        | 1.8660         | 0.0280        |               | 0.3545        | 0.3545        |                | 0.3545        | 0.3545        | 0.0000        | 5,598.0000        | 5,598.0000        | 0.1073        | 0.1026        | 5,631.2661        |
| Landscaping           | 0.7771        | 0.2961        | 25.7115        | 1.3600e-003   |               | 0.1424        | 0.1424        |                | 0.1424        | 0.1424        |               | 46.3381           | 46.3381           | 0.0447        |               | 47.4553           |
| <b>Total</b>          | <b>8.8501</b> | <b>4.6812</b> | <b>27.5775</b> | <b>0.0294</b> |               | <b>0.4969</b> | <b>0.4969</b> |                | <b>0.4969</b> | <b>0.4969</b> | <b>0.0000</b> | <b>5,644.3381</b> | <b>5,644.3381</b> | <b>0.1520</b> | <b>0.1026</b> | <b>5,678.7215</b> |

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Use Water Efficient Irrigation System

Alexan Arcadia EIR Alternative Analysis - Los Angeles-South Coast County, Winter

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

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

**9.0 Operational Offroad**

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

**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 |
|----------------|--------|-----------|------------|-------------|-------------|-----------|
|----------------|--------|-----------|------------|-------------|-------------|-----------|

**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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