# APPENDIX A

AIR QUALITY, GREENHOUSE GAS, AND ENERGY DATA

Construction Fuel Consumption

| On-Site Diesel[1] | $MTCO_2e$ | Gallons of Fuel[4] | Construction Year 2025 County Fuel | Percent |
|---|---|---|---|---|
| Demolition | 0 | 0 | | |
| Site Preparation/Grading | 276 | 27,216 | | |
| Building Construction | 710 | 69,977 | | |
| Paving | 44 | 4,374 | | |
| Architectural Coating | 11 | 1,083 | | |
| Total | 1,042 | 102,650 | 259,549,258 | 0.0395% |

| Off-Site Diesel[1] | | | | |
|---|---|---|---|---|
| Demolition | 0 | 0 | | |
| Site Preparation/Grading | 13 | 1,250 | | |
| Building Construction | 218 | 21,522 | | |
| Paving | 0 | 0 | | |
| Architectural Coating | 0 | 0 | | |
| Total | 231 | 22,772 | 259,549,258 | 0.0088% |

| Off-Site Gasoline[2] | | | | |
|---|---|---|---|---|
| Demolition | 0 | 0 | | |
| Site Preparation/Grading | 9 | 1,035 | | |
| Building Construction | 698 | 79,189 | | |
| Paving | 3 | 297 | | |
| Architectural Coating | 19 | 2,168 | | |
| Total | 728 | 82,689 | 698,621,144 | 0.0118% |

| | | | | |
|---|---|---|---|---|
| Total Diesel Fuel | | 125,422 | 259,549,258 | 0.0483% |
| Total Gasoline Fuel | | 82,689 | 698,621,144 | 0.0118% |
| Total Construction Fuel | 2,002 | 208,111 | | |

| Construction Phase[3] | Demolition | | | Site Preparation | | | Grading | | |
|---|---|---|---|---|---|---|---|---|---|
| | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) |
| 2023 | | | | 37 | 0 | 2 | 239 | 13 | 7 |
| 2024 | | | | | | | | | |
| Total | 0 | 0 | 0 | 37 | 0 | 2 | 239 | 13 | 7 |

| Construction Phase[3] | Building Construction | | | Paving | | | Architectural Coating | | |
|---|---|---|---|---|---|---|---|---|---|
| | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) | On-Site Diesel (Off-Road) | Off-Site Diesel (Hauling/Vendor) | Off-Site Gas (Worker) |
| 2024 | 306 | 95 | 305 | | | | | | |
| 2025 | 304 | 93 | 297 | | | | | | |
| 2026 | 100 | 30 | 95 | 44 | 0 | 3 | 11 | 0 | 19 |
| Total | 710 | 218 | 698 | 44 | 0 | 3 | 11 | 0 | 19 |

Notes:

[1] Fuel used for off-road, hauling, and vendor trips assumed to be diesel.

[2] Fuel used for worker trips assumed to be gasoline.

[3] $MTCO_2e$ rates from CalEEMod (3.0 Construction Details).

[4] For CO2e emissions, see Chapter 13 (page 94); Conversion Ratios: Climate Registry, General Reporting Protocol, 2016.

Climate Registry Conversion Ratios:

- Gasoline: 10.15 kg $CO_2$ per gallon / 1,000 kg per metric ton

Operational Fuel

| Vehicle Type | Percent[1] | Annual VMT[2] | MPG[3] | Annual Fuel (Gallons) | Fuel Type | Riverside Gallons[4] | Riverside Percent | |
|---|---|---|---|---|---|---|---|---|
| Passenger Cars | 0.9629 | 8,659,933 | 21.6 | 400,923 | Gas | 698,621,144 | 0.0574% | |
| Light/Medium Trucks | 0.0192 | 172,299 | 17.2 | 10,017 | Diesel | 259,549,258 | 0.0039% | 0.0144% |
| Heavy Trucks/Other | 0.0186 | 167,289 | 6.1 | 27,424 | Diesel | 259,549,258 | 0.0106% | |
| | | | | 37,442 | | 259,549,258 | 0.0144% | |
| Total | | 8,994,053 | | 438,365 | | 958,170,402 | | |

Fleet Mix - Commerce Center I

| Land Use | LDA | LDT1 | LDT2 | MCY | MDV | LHD1 | LHD2 | MHD | OBUS | UBUS | SBUS | MH | HHD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.542916 | 0.056689 | 0.17445 | 0.023389 | 0.134041 | 0.02468 | 0.00696 | 0.011589 | 0.000608 | 0.000298 | 0.001091 | 0.004689 | 0.0186 |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | 0.542916 | 0.056689 | 0.174450 | 0.023389 | 0.134041 | 0.024680 | 0.006960 | 0.011589 | 0.000608 | 0.000298 | 0.001091 | 0.004689 | 0.018600 |

Notes:

[1] Percent of vehicle trip distribution based on fleet mix from CalEEMod (4.4 Fleet Mix).

[2] Total annual operational VMT based on mitigated annual VMT from CalEEMod (4.2 Trip Summary Information).

[3] Average fuel economy derived from Department of Transportation.

[4] Total annual county fuel per EMFAC 2021 model of projected operational fuel usage.

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

# LMC Murrieta Apartments

**Riverside-South Coast County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Parking Lot | 547.00 | Space | 4.92 | 218,800.00 | 0 |
| City Park | 2.47 | Acre | 2.47 | 107,593.20 | 0 |
| Apartments Mid Rise | 389.00 | Dwelling Unit | 5.61 | 389,000.00 | 1113 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.4 | **Precipitation Freq (Days)** | 28 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - City Park = landscaping. Total parking is 80 spaces, with 253 included in the apartment building footprint. Therefore, 547 total parkng spaces were modeled to represent surface parking areas.
Construction Phase - Construction dates from construction plans.

Trips and VMT -

Grading - contractor provided

Vehicle Trips - Per Traffic Study

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblArchitecturalCoating | ConstArea_Parking | 13,128.00 | 0.00 |
| tblAreaCoating | Area_Parking | 13128 | 0 |
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 6 |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0 | 12 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 20.00 | 86.00 |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | | | |
|---|---|---|---|
| tblConstructionPhase | NumDays | 300.00 | 609.00 |
| tblConstructionPhase | NumDays | 30.00 | 87.00 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblConstructionPhase | NumDays | 10.00 | 22.00 |
| tblFleetMix | HHD | 0.02 | 0.00 |
| tblFleetMix | HHD | 0.02 | 0.00 |
| tblFleetMix | LDA | 0.54 | 0.00 |
| tblFleetMix | LDA | 0.54 | 0.00 |
| tblFleetMix | LDT1 | 0.06 | 0.00 |
| tblFleetMix | LDT1 | 0.06 | 0.00 |
| tblFleetMix | LDT2 | 0.17 | 0.00 |
| tblFleetMix | LDT2 | 0.17 | 0.00 |
| tblFleetMix | LHD1 | 0.02 | 0.00 |
| tblFleetMix | LHD1 | 0.02 | 0.00 |
| tblFleetMix | LHD2 | 6.9600e-003 | 0.00 |
| tblFleetMix | LHD2 | 6.9600e-003 | 0.00 |
| tblFleetMix | MCY | 0.02 | 0.00 |
| tblFleetMix | MCY | 0.02 | 0.00 |
| tblFleetMix | MDV | 0.13 | 0.00 |
| tblFleetMix | MDV | 0.13 | 0.00 |
| tblFleetMix | MH | 4.6890e-003 | 0.00 |
| tblFleetMix | MH | 4.6890e-003 | 0.00 |
| tblFleetMix | MHD | 0.01 | 0.00 |
| tblFleetMix | MHD | 0.01 | 0.00 |
| tblFleetMix | OBUS | 6.0800e-004 | 0.00 |
| tblFleetMix | OBUS | 6.0800e-004 | 0.00 |
| tblFleetMix | SBUS | 1.0910e-003 | 0.00 |
| tblFleetMix | SBUS | 1.0910e-003 | 0.00 |
| tblFleetMix | UBUS | 2.9800e-004 | 0.00 |
| tblFleetMix | UBUS | 2.9800e-004 | 0.00 |
| tblGrading | MaterialImported | 0.00 | 4,600.00 |
| tblLandUse | LotAcreage | 10.24 | 5.61 |
| tblTripsAndVMT | VendorTripNumber | 95.00 | 42.00 |
| tblTripsAndVMT | WorkerTripNumber | 417.00 | 280.00 |
| tblTripsAndVMT | WorkerTripNumber | 83.00 | 56.00 |
| tblVehicleTrips | ST_TR | 4.91 | 6.76 |
| tblVehicleTrips | SU_TR | 4.09 | 6.76 |
| tblVehicleTrips | WD_TR | 5.44 | 6.76 |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.1777 | 1.8307 | 1.4607 | 3.3400e-003 | 0.6323 | 0.0762 | 0.7085 | 0.2743 | 0.0701 | 0.3444 | 0.0000 | 295.1813 | 295.1813 | 0.0890 | 2.1500e-003 | 298.0464 |
| 2024 | 0.3098 | 2.0283 | 3.2709 | 7.7200e-003 | 0.4379 | 0.0837 | 0.5217 | 0.1171 | 0.0788 | 0.1958 | 0.0000 | 697.8642 | 697.8642 | 0.0797 | 0.0210 | 706.1205 |
| 2025 | 0.2879 | 1.8838 | 3.1747 | 7.5600e-003 | 0.4363 | 0.0721 | 0.5084 | 0.1166 | 0.0679 | 0.1845 | 0.0000 | 686.3530 | 686.3530 | 0.0784 | 0.0202 | 694.3231 |
| 2026 | 1.3511 | 0.8607 | 1.4948 | 3.3100e-003 | 0.1738 | 0.0353 | 0.2091 | 0.0464 | 0.0331 | 0.0796 | 0.0000 | 299.9473 | 299.9473 | 0.0409 | 6.9200e-003 | 303.0314 |
| **Maximum** | **1.3511** | **2.0283** | **3.2709** | **7.7200e-003** | **0.6323** | **0.0837** | **0.7085** | **0.2743** | **0.0788** | **0.3444** | **0.0000** | **697.8642** | **697.8642** | **0.0890** | **0.0210** | **706.1205** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2023 | 0.1777 | 1.8307 | 1.4607 | 3.3400e-003 | 0.2785 | 0.0762 | 0.3547 | 0.1195 | 0.0701 | 0.1896 | 0.0000 | 295.1809 | 295.1809 | 0.0890 | 2.1500e-003 | 298.0461 |
| 2024 | 0.3098 | 2.0283 | 3.2709 | 7.7200e-003 | 0.4155 | 0.0837 | 0.4992 | 0.1116 | 0.0788 | 0.1903 | 0.0000 | 697.8638 | 697.8638 | 0.0797 | 0.0210 | 706.1201 |
| 2025 | 0.2879 | 1.8838 | 3.1747 | 7.5600e-003 | 0.4139 | 0.0721 | 0.4860 | 0.1112 | 0.0679 | 0.1790 | 0.0000 | 686.3527 | 686.3527 | 0.0784 | 0.0202 | 694.3227 |
| 2026 | 1.3511 | 0.8607 | 1.4948 | 3.3100e-003 | 0.1649 | 0.0353 | 0.2002 | 0.0442 | 0.0331 | 0.0774 | 0.0000 | 299.9471 | 299.9471 | 0.0409 | 6.9200e-003 | 303.0312 |
| **Maximum** | **1.3511** | **2.0283** | **3.2709** | **7.7200e-003** | **0.4155** | **0.0837** | **0.4992** | **0.1195** | **0.0788** | **0.1903** | **0.0000** | **697.8638** | **697.8638** | **0.0890** | **0.0210** | **706.1201** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 24.26 | 0.00 | 20.92 | 30.30 | 0.00 | 20.89 | 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 | 8-1-2023 | 10-31-2023 | 1.1771 | 1.1771 |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | | | | |
|---|---|---|---|---|
| **2** | **11-1-2023** | **1-31-2024** | 1.0372 | 1.0372 |
| **3** | **2-1-2024** | **4-30-2024** | 0.5747 | 0.5747 |
| **4** | **5-1-2024** | **7-31-2024** | 0.5865 | 0.5865 |
| **5** | **8-1-2024** | **10-31-2024** | 0.5870 | 0.5870 |
| **6** | **11-1-2024** | **1-31-2025** | 0.5746 | 0.5746 |
| **7** | **2-1-2025** | **4-30-2025** | 0.5299 | 0.5299 |
| **8** | **5-1-2025** | **7-31-2025** | 0.5468 | 0.5468 |
| **9** | **8-1-2025** | **10-31-2025** | 0.5473 | 0.5473 |
| **10** | **11-1-2025** | **1-31-2026** | 0.8778 | 0.8778 |
| **11** | **2-1-2026** | **4-30-2026** | 1.6942 | 1.6942 |
| | | **Highest** | 1.6942 | 1.6942 |

## 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 | 2.9376 | 0.1471 | 6.4877 | 6.5200e-003 | | 0.3937 | 0.3937 | | 0.3937 | 0.3937 | 41.3192 | 85.9679 | 127.2871 | 0.1295 | 2.8000e-003 | 131.3612 |
| Energy | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 585.3246 | 585.3246 | 0.0299 | 8.4100e-003 | 588.5781 |
| Mobile | 1.1806 | 1.8380 | 12.2689 | 0.0299 | 3.4001 | 0.0239 | 3.4240 | 0.9081 | 0.0224 | 0.9305 | 0.0000 | 2,853.3330 | 2,853.3330 | 0.1398 | 0.1360 | 2,897.3545 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 36.3658 | 0.0000 | 36.3658 | 2.1492 | 0.0000 | 90.0948 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 8.0408 | 95.8077 | 103.8484 | 0.8340 | 0.0205 | 130.8004 |
| **Total** | **4.1484** | **2.2429** | **18.8662** | **0.0381** | **3.4001** | **0.4384** | **3.8386** | **0.9081** | **0.4369** | **1.3450** | **85.7258** | **3,620.4331** | **3,706.1589** | **3.2824** | **0.1677** | **3,838.1891** |

**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 | 1.6151 | 0.1093 | 3.0808 | 6.0000e-004 | | 0.0225 | 0.0225 | | 0.0225 | 0.0225 | 0.0000 | 88.6648 | 88.6648 | 4.9100e-003 | 1.5400e-003 | 89.2469 |
| Energy | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 361.9167 | 361.9167 | 0.0111 | 6.1200e-003 | 364.0177 |

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 1.1230 | 1.6933 | 11.2789 | 0.0270 | 3.0601 | 0.0217 | 3.0818 | 0.8173 | 0.0203 | 0.8376 | 0.0000 | 2,575.4985 | 2,575.4985 | 0.1302 | 0.1249 | 2,615.9749 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 18.1829 | 0.0000 | 18.1829 | 1.0746 | 0.0000 | 45.0474 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 6.4326 | 81.8282 | 88.2608 | 0.6676 | 0.0164 | 109.8491 |
| **Total** | **2.7683** | **2.0604** | **14.4694** | **0.0293** | **3.0601** | **0.0650** | **3.1251** | **0.8173** | **0.0636** | **0.8809** | **24.6155** | **3,107.9081** | **3,132.5237** | **1.8883** | **0.1490** | **3,224.1360** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **33.27** | **8.14** | **23.31** | **23.17** | **10.00** | **85.18** | **18.59** | **10.00** | **85.44** | **34.51** | **71.29** | **14.16** | **15.48** | **42.47** | **11.14** | **16.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/1/2023 | 8/30/2023 | 5 | 22 | |
| 2 | Grading | Grading | 8/31/2023 | 12/31/2023 | 5 | 87 | |
| 3 | Building Construction | Building Construction | 1/1/2024 | 4/30/2026 | 5 | 609 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2026 | 4/30/2026 | 5 | 86 | |
| 5 | Paving | Paving | 2/28/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 33**

**Acres of Grading (Grading Phase): 261**

**Acres of Paving: 4.92**

**Residential Indoor: 787,725; Residential Outdoor: 262,575; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural**

**OffRoad Equipment**

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |

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

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

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 455.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 280.00 | 42.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 56.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Site Preparation - 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 | | | | | |
| Fugitive Dust | | | | | 0.2162 | 0.0000 | 0.2162 | 0.1111 | 0.0000 | 0.1111 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0293 | 0.3028 | 0.2007 | 4.2000e-004 | | 0.0139 | 0.0139 | | 0.0128 | 0.0128 | 0.0000 | 36.7958 | 36.7958 | 0.0119 | 0.0000 | 37.0933 |
| **Total** | **0.0293** | **0.3028** | **0.2007** | **4.2000e-004** | **0.2162** | **0.0139** | **0.2302** | **0.1111** | **0.0128** | **0.1239** | **0.0000** | **36.7958** | **36.7958** | **0.0119** | **0.0000** | **37.0933** |

**Unmitigated Construction Off-Site**

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 4.8000e-004 | 6.2200e-003 | 2.0000e-005 | 2.1800e-003 | 1.0000e-005 | 2.1900e-003 | 5.8000e-004 | 1.0000e-005 | 5.9000e-004 | 0.0000 | 1.6757 | 1.6757 | 4.0000e-005 | 4.0000e-005 | 1.6899 |
| **Total** | **6.4000e-004** | **4.8000e-004** | **6.2200e-003** | **2.0000e-005** | **2.1800e-003** | **1.0000e-005** | **2.1900e-003** | **5.8000e-004** | **1.0000e-005** | **5.9000e-004** | **0.0000** | **1.6757** | **1.6757** | **4.0000e-005** | **4.0000e-005** | **1.6899** |

**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 | | | | | 0.0924 | 0.0000 | 0.0924 | 0.0475 | 0.0000 | 0.0475 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0293 | 0.3028 | 0.2007 | 4.2000e-004 | | 0.0139 | 0.0139 | | 0.0128 | 0.0128 | 0.0000 | 36.7957 | 36.7957 | 0.0119 | 0.0000 | 37.0932 |
| **Total** | **0.0293** | **0.3028** | **0.2007** | **4.2000e-004** | **0.0924** | **0.0139** | **0.1064** | **0.0475** | **0.0128** | **0.0603** | **0.0000** | **36.7957** | **36.7957** | **0.0119** | **0.0000** | **37.0932** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4000e-004 | 4.8000e-004 | 6.2200e-003 | 2.0000e-005 | 2.0600e-003 | 1.0000e-005 | 2.0700e-003 | 5.5000e-004 | 1.0000e-005 | 5.6000e-004 | 0.0000 | 1.6757 | 1.6757 | 4.0000e-005 | 4.0000e-005 | 1.6899 |
| **Total** | **6.4000e-004** | **4.8000e-004** | **6.2200e-003** | **2.0000e-005** | **2.0600e-003** | **1.0000e-005** | **2.0700e-003** | **5.5000e-004** | **1.0000e-005** | **5.6000e-004** | **0.0000** | **1.6757** | **1.6757** | **4.0000e-005** | **4.0000e-005** | **1.6899** |

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LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

### 3.3 Grading - 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 | | | | | |
| Fugitive Dust | | | | | 0.4004 | 0.0000 | 0.4004 | 0.1589 | 0.0000 | 0.1589 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.1445 | 1.5014 | 1.2202 | 2.7000e-003 | | 0.0620 | 0.0620 | | 0.0570 | 0.0570 | 0.0000 | 237.2282 | 237.2282 | 0.0767 | 0.0000 | 239.1463 |
| **Total** | **0.1445** | **1.5014** | **1.2202** | **2.7000e-003** | **0.4004** | **0.0620** | **0.4623** | **0.1589** | **0.0570** | **0.2160** | **0.0000** | **237.2282** | **237.2282** | **0.0767** | **0.0000** | **239.1463** |

**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 | 4.8000e-004 | 0.0240 | 6.3000e-003 | 1.3000e-004 | 3.9200e-003 | 2.7000e-004 | 4.2000e-003 | 1.0800e-003 | 2.6000e-004 | 1.3400e-003 | 0.0000 | 12.1185 | 12.1185 | 1.7000e-004 | 1.9100e-003 | 12.6918 |
| 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 | 2.8200e-003 | 2.0900e-003 | 0.0273 | 8.0000e-005 | 9.5600e-003 | 5.0000e-005 | 9.6100e-003 | 2.5400e-003 | 4.0000e-005 | 2.5800e-003 | 0.0000 | 7.3631 | 7.3631 | 1.8000e-004 | 1.9000e-004 | 7.4252 |
| **Total** | **3.3000e-003** | **0.0261** | **0.0336** | **2.1000e-004** | **0.0135** | **3.2000e-004** | **0.0138** | **3.6200e-003** | **3.0000e-004** | **3.9200e-003** | **0.0000** | **19.4816** | **19.4816** | **3.5000e-004** | **2.1000e-003** | **20.1170** |

**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 | | | | | 0.1712 | 0.0000 | 0.1712 | 0.0680 | 0.0000 | 0.0680 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1445 | 1.5014 | 1.2202 | 2.7000e-003 | | 0.0620 | 0.0620 | | 0.0570 | 0.0570 | 0.0000 | 237.2279 | 237.2279 | 0.0767 | 0.0000 | 239.1460 |
| **Total** | **0.1445** | **1.5014** | **1.2202** | **2.7000e-003** | **0.1712** | **0.0620** | **0.2331** | **0.0680** | **0.0570** | **0.1250** | **0.0000** | **237.2279** | **237.2279** | **0.0767** | **0.0000** | **239.1460** |

**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 | 4.8000e-004 | 0.0240 | 6.3000e-003 | 1.3000e-004 | 3.7500e-003 | 2.7000e-004 | 4.0200e-003 | 1.0300e-003 | 2.6000e-004 | 1.3000e-003 | 0.0000 | 12.1185 | 12.1185 | 1.7000e-004 | 1.9100e-003 | 12.6918 |
| 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 | 2.8200e-003 | 2.0900e-003 | 0.0273 | 8.0000e-005 | 9.0600e-003 | 5.0000e-005 | 9.1100e-003 | 2.4200e-003 | 4.0000e-005 | 2.4600e-003 | 0.0000 | 7.3631 | 7.3631 | 1.8000e-004 | 1.9000e-004 | 7.4252 |
| **Total** | **3.3000e-003** | **0.0261** | **0.0336** | **2.1000e-004** | **0.0128** | **3.2000e-004** | **0.0131** | **3.4500e-003** | **3.0000e-004** | **3.7600e-003** | **0.0000** | **19.4816** | **19.4816** | **3.5000e-004** | **2.1000e-003** | **20.1170** |

## 3.4 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 | 0.1928 | 1.7611 | 2.1179 | 3.5300e-003 | | 0.0803 | 0.0803 | | 0.0756 | 0.0756 | 0.0000 | 303.7223 | 303.7223 | 0.0718 | 0.0000 | 305.5179 |
| **Total** | **0.1928** | **1.7611** | **2.1179** | **3.5300e-003** | | **0.0803** | **0.0803** | | **0.0756** | **0.0756** | **0.0000** | **303.7223** | **303.7223** | **0.0718** | **0.0000** | **305.5179** |

**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 | | | | | |

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 5.8700e-003 | 0.1887 | 0.0743 | 9.5000e-004 | 0.0348 | 1.5600e-003 | 0.0363 | 0.0100 | 1.4900e-003 | 0.0115 | 0.0000 | 91.1454 | 91.1454 | 9.7000e-004 | 0.0135 | 95.1796 |
| Worker | 0.1112 | 0.0786 | 1.0787 | 3.2400e-003 | 0.4032 | 1.8400e-003 | 0.4050 | 0.1071 | 1.6900e-003 | 0.1088 | 0.0000 | 302.9965 | 302.9965 | 6.9400e-003 | 7.5600e-003 | 305.4230 |
| **Total** | **0.1171** | **0.2672** | **1.1530** | **4.1900e-003** | **0.4379** | **3.4000e-003** | **0.4413** | **0.1171** | **3.1800e-003** | **0.1203** | **0.0000** | **394.1419** | **394.1419** | **7.9100e-003** | **0.0210** | **400.6026** |

**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 | 0.1928 | 1.7611 | 2.1179 | 3.5300e-003 | | 0.0803 | 0.0803 | | 0.0756 | 0.0756 | 0.0000 | 303.7220 | 303.7220 | 0.0718 | 0.0000 | 305.5175 |
| **Total** | **0.1928** | **1.7611** | **2.1179** | **3.5300e-003** | | **0.0803** | **0.0803** | | **0.0756** | **0.0756** | **0.0000** | **303.7220** | **303.7220** | **0.0718** | **0.0000** | **305.5175** |

**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 | 5.8700e-003 | 0.1887 | 0.0743 | 9.5000e-004 | 0.0333 | 1.5600e-003 | 0.0348 | 9.6700e-003 | 1.4900e-003 | 0.0112 | 0.0000 | 91.1454 | 91.1454 | 9.7000e-004 | 0.0135 | 95.1796 |
| Worker | 0.1112 | 0.0786 | 1.0787 | 3.2400e-003 | 0.3822 | 1.8400e-003 | 0.3840 | 0.1019 | 1.6900e-003 | 0.1036 | 0.0000 | 302.9965 | 302.9965 | 6.9400e-003 | 7.5600e-003 | 305.4230 |
| **Total** | **0.1171** | **0.2672** | **1.1530** | **4.1900e-003** | **0.4155** | **3.4000e-003** | **0.4189** | **0.1116** | **3.1800e-003** | **0.1148** | **0.0000** | **394.1419** | **394.1419** | **7.9100e-003** | **0.0210** | **400.6026** |

## 3.4 Building Construction - 2025

**Unmitigated Construction On-Site**

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1785 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6549 | 302.6549 | 0.0711 | 0.0000 | 304.4335 |
| **Total** | **0.1785** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6549** | **302.6549** | **0.0711** | **0.0000** | **304.4335** |

**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 | 5.7700e-003 | 0.1864 | 0.0732 | 9.3000e-004 | 0.0346 | 1.5500e-003 | 0.0362 | 9.9900e-003 | 1.4900e-003 | 0.0115 | 0.0000 | 89.1975 | 89.1975 | 1.0000e-003 | 0.0131 | 93.1389 |
| Worker | 0.1037 | 0.0702 | 1.0024 | 3.1200e-003 | 0.4016 | 1.7400e-003 | 0.4034 | 0.1067 | 1.6000e-003 | 0.1083 | 0.0000 | 294.5006 | 294.5006 | 6.2500e-003 | 7.0300e-003 | 296.7507 |
| **Total** | **0.1094** | **0.2565** | **1.0756** | **4.0500e-003** | **0.4362** | **3.2900e-003** | **0.4395** | **0.1166** | **3.0900e-003** | **0.1197** | **0.0000** | **383.6981** | **383.6981** | **7.2500e-003** | **0.0202** | **389.8896** |

**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 | 0.1784 | 1.6273 | 2.0991 | 3.5200e-003 | | 0.0689 | 0.0689 | | 0.0648 | 0.0648 | 0.0000 | 302.6545 | 302.6545 | 0.0711 | 0.0000 | 304.4331 |
| **Total** | **0.1784** | **1.6273** | **2.0991** | **3.5200e-003** | | **0.0689** | **0.0689** | | **0.0648** | **0.0648** | **0.0000** | **302.6545** | **302.6545** | **0.0711** | **0.0000** | **304.4331** |

**Mitigated Construction Off-Site**

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 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 | 5.7700e-003 | 0.1864 | 0.0732 | 9.3000e-004 | 0.0332 | 1.5500e-003 | 0.0347 | 9.6300e-003 | 1.4900e-003 | 0.0111 | 0.0000 | 89.1975 | 89.1975 | 1.0000e-003 | 0.0131 | 93.1389 |
| Worker | 0.1037 | 0.0702 | 1.0024 | 3.1200e-003 | 0.3807 | 1.7400e-003 | 0.3825 | 0.1015 | 1.6000e-003 | 0.1031 | 0.0000 | 294.5006 | 294.5006 | 6.2500e-003 | 7.0300e-003 | 296.7507 |
| **Total** | **0.1094** | **0.2565** | **1.0756** | **4.0500e-003** | **0.4139** | **3.2900e-003** | **0.4172** | **0.1112** | **3.0900e-003** | **0.1142** | **0.0000** | **383.6981** | **383.6981** | **7.2500e-003** | **0.0202** | **389.8896** |

## 3.4 Building Construction - 2026

**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 | 0.0588 | 0.5362 | 0.6916 | 1.1600e-003 | | 0.0227 | 0.0227 | | 0.0213 | 0.0213 | 0.0000 | 99.7254 | 99.7254 | 0.0234 | 0.0000 | 100.3114 |
| **Total** | **0.0588** | **0.5362** | **0.6916** | **1.1600e-003** | | **0.0227** | **0.0227** | | **0.0213** | **0.0213** | **0.0000** | **99.7254** | **99.7254** | **0.0234** | **0.0000** | **100.3114** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.8800e-003 | 0.0608 | 0.0239 | 3.0000e-004 | 0.0114 | 5.1000e-004 | 0.0119 | 3.2900e-003 | 4.9000e-004 | 3.7800e-003 | 0.0000 | 28.8562 | 28.8562 | 3.4000e-004 | 4.2400e-003 | 30.1292 |
| Worker | 0.0321 | 0.0209 | 0.3102 | 9.9000e-004 | 0.1323 | 5.4000e-004 | 0.1329 | 0.0351 | 5.0000e-004 | 0.0356 | 0.0000 | 94.7887 | 94.7887 | 1.8700e-003 | 2.1800e-003 | 95.4844 |
| **Total** | **0.0340** | **0.0817** | **0.3341** | **1.2900e-003** | **0.1438** | **1.0500e-003** | **0.1448** | **0.0384** | **9.9000e-004** | **0.0394** | **0.0000** | **123.6448** | **123.6448** | **2.2100e-003** | **6.4200e-003** | **125.6136** |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

**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 | 0.0588 | 0.5362 | 0.6916 | 1.1600e-003 | | 0.0227 | 0.0227 | | 0.0213 | 0.0213 | 0.0000 | 99.7253 | 99.7253 | 0.0234 | 0.0000 | 100.3113 |
| **Total** | **0.0588** | **0.5362** | **0.6916** | **1.1600e-003** | | **0.0227** | **0.0227** | | **0.0213** | **0.0213** | **0.0000** | **99.7253** | **99.7253** | **0.0234** | **0.0000** | **100.3113** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 1.8800e-003 | 0.0608 | 0.0239 | 3.0000e-004 | 0.0109 | 5.1000e-004 | 0.0114 | 3.1700e-003 | 4.9000e-004 | 3.6600e-003 | 0.0000 | 28.8562 | 28.8562 | 3.4000e-004 | 4.2400e-003 | 30.1292 |
| Worker | 0.0321 | 0.0209 | 0.3102 | 9.9000e-004 | 0.1255 | 5.4000e-004 | 0.1260 | 0.0335 | 5.0000e-004 | 0.0340 | 0.0000 | 94.7887 | 94.7887 | 1.8700e-003 | 2.1800e-003 | 95.4844 |
| **Total** | **0.0340** | **0.0817** | **0.3341** | **1.2900e-003** | **0.1364** | **1.0500e-003** | **0.1374** | **0.0366** | **9.9000e-004** | **0.0376** | **0.0000** | **123.6448** | **123.6448** | **2.2100e-003** | **6.4200e-003** | **125.6136** |

### 3.5 Architectural Coating - 2026

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 1.2170 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.3500e-003 | 0.0493 | 0.0778 | 1.3000e-004 | | 2.2100e-003 | 2.2100e-003 | | 2.2100e-003 | 2.2100e-003 | 0.0000 | 10.9790 | 10.9790 | 6.0000e-004 | 0.0000 | 10.9940 |
| **Total** | **1.2244** | **0.0493** | **0.0778** | **1.3000e-004** | | **2.2100e-003** | **2.2100e-003** | | **2.2100e-003** | **2.2100e-003** | **0.0000** | **10.9790** | **10.9790** | **6.0000e-004** | **0.0000** | **10.9940** |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4300e-003 | 4.1800e-003 | 0.0620 | 2.0000e-004 | 0.0265 | 1.1000e-004 | 0.0266 | 7.0300e-003 | 1.0000e-004 | 7.1300e-003 | 0.0000 | 18.9577 | 18.9577 | 3.7000e-004 | 4.4000e-004 | 19.0969 |
| **Total** | **6.4300e-003** | **4.1800e-003** | **0.0620** | **2.0000e-004** | **0.0265** | **1.1000e-004** | **0.0266** | **7.0300e-003** | **1.0000e-004** | **7.1300e-003** | **0.0000** | **18.9577** | **18.9577** | **3.7000e-004** | **4.4000e-004** | **19.0969** |

**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 1.2170 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.3500e-003 | 0.0493 | 0.0778 | 1.3000e-004 | | 2.2100e-003 | 2.2100e-003 | | 2.2100e-003 | 2.2100e-003 | 0.0000 | 10.9790 | 10.9790 | 6.0000e-004 | 0.0000 | 10.9940 |
| **Total** | **1.2244** | **0.0493** | **0.0778** | **1.3000e-004** | | **2.2100e-003** | **2.2100e-003** | | **2.2100e-003** | **2.2100e-003** | **0.0000** | **10.9790** | **10.9790** | **6.0000e-004** | **0.0000** | **10.9940** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.4300e-003 | 4.1800e-003 | 0.0620 | 2.0000e-004 | 0.0251 | 1.1000e-004 | 0.0252 | 6.6900e-003 | 1.0000e-004 | 6.7900e-003 | 0.0000 | 18.9577 | 18.9577 | 3.7000e-004 | 4.4000e-004 | 19.0969 |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **6.4300e-003** | **4.1800e-003** | **0.0620** | **2.0000e-004** | **0.0251** | **1.1000e-004** | **0.0252** | **6.6900e-003** | **1.0000e-004** | **6.7900e-003** | **0.0000** | **18.9577** | **18.9577** | **3.7000e-004** | **4.4000e-004** | **19.0969** |

### 3.6 Paving - 2026

**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 | 0.0201 | 0.1888 | 0.3207 | 5.0000e-004 | | 9.2100e-003 | 9.2100e-003 | | 8.4700e-003 | 8.4700e-003 | 0.0000 | 44.0424 | 44.0424 | 0.0142 | 0.0000 | 44.3985 |
| Paving | 6.4500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0266** | **0.1888** | **0.3207** | **5.0000e-004** | | **9.2100e-003** | **9.2100e-003** | | **8.4700e-003** | **8.4700e-003** | **0.0000** | **44.0424** | **44.0424** | **0.0142** | **0.0000** | **44.3985** |

**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 | 8.8000e-004 | 5.7000e-004 | 8.5000e-003 | 3.0000e-005 | 3.6300e-003 | 1.0000e-005 | 3.6400e-003 | 9.6000e-004 | 1.0000e-005 | 9.8000e-004 | 0.0000 | 2.5980 | 2.5980 | 5.0000e-005 | 6.0000e-005 | 2.6171 |
| **Total** | **8.8000e-004** | **5.7000e-004** | **8.5000e-003** | **3.0000e-005** | **3.6300e-003** | **1.0000e-005** | **3.6400e-003** | **9.6000e-004** | **1.0000e-005** | **9.8000e-004** | **0.0000** | **2.5980** | **2.5980** | **5.0000e-005** | **6.0000e-005** | **2.6171** |

**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 | | | | | |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.0201 | 0.1888 | 0.3207 | 5.0000e-004 | | 9.2100e-003 | 9.2100e-003 | | 8.4700e-003 | 8.4700e-003 | 0.0000 | 44.0423 | 44.0423 | 0.0142 | 0.0000 | 44.3984 |
| Paving | 6.4500e-003 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0266** | **0.1888** | **0.3207** | **5.0000e-004** | | **9.2100e-003** | **9.2100e-003** | | **8.4700e-003** | **8.4700e-003** | **0.0000** | **44.0423** | **44.0423** | **0.0142** | **0.0000** | **44.3984** |

**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 | 8.8000e-004 | 5.7000e-004 | 8.5000e-003 | 3.0000e-005 | 3.4400e-003 | 1.0000e-005 | 3.4500e-003 | 9.2000e-004 | 1.0000e-005 | 9.3000e-004 | 0.0000 | 2.5980 | 2.5980 | 5.0000e-005 | 6.0000e-005 | 2.6171 |
| **Total** | **8.8000e-004** | **5.7000e-004** | **8.5000e-003** | **3.0000e-005** | **3.4400e-003** | **1.0000e-005** | **3.4500e-003** | **9.2000e-004** | **1.0000e-005** | **9.3000e-004** | **0.0000** | **2.5980** | **2.5980** | **5.0000e-005** | **6.0000e-005** | **2.6171** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

| | ROG | NOx | CO | SO2 | Fugitive 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 | 1.1230 | 1.6933 | 11.2789 | 0.0270 | 3.0601 | 0.0217 | 3.0818 | 0.8173 | 0.0203 | 0.8376 | 0.0000 | 2,575.4985 | 2,575.4985 | 0.1302 | 0.1249 | 2,615.9749 |
| Unmitigated | 1.1806 | 1.8380 | 12.2689 | 0.0299 | 3.4001 | 0.0239 | 3.4240 | 0.9081 | 0.0224 | 0.9305 | 0.0000 | 2,853.3330 | 2,853.3330 | 0.1398 | 0.1360 | 2,897.3545 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | |
|---|---|---|---|
| | Unmitigated | Mitigated | |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
|---|---|---|---|---|---|
| Apartments Mid Rise | 2,629.64 | 2,629.64 | 2629.64 | 8,985,879 | 8,087,291 |
| City Park | 1.93 | 4.84 | 5.41 | 8,174 | 7,356 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 2,631.57 | 2,634.48 | 2,635.05 | 8,994,053 | 8,094,648 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Apartments Mid Rise | 14.70 | 5.90 | 8.70 | 40.20 | 19.20 | 40.60 | 86 | 11 | 3 |
| City Park | 16.60 | 8.40 | 6.90 | 33.00 | 48.00 | 19.00 | 66 | 28 | 6 |
| Parking Lot | 16.60 | 8.40 | 6.90 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

### 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.542916 | 0.056689 | 0.174450 | 0.134041 | 0.024680 | 0.006960 | 0.011589 | 0.018600 | 0.000608 | 0.000298 | 0.023389 | 0.001091 | 0.004689 |
| City Park | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |
| Parking Lot | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 | 0.000000 |

## 5.0 Energy Detail

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

| | ROG | NOx | CO | SO2 | Fugitive 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 | 63.3641 | 63.3641 | 5.3500e-003 | 6.5000e-004 | 63.6910 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 286.7720 | 286.7720 | 0.0242 | 2.9300e-003 | 288.2514 |
| NaturalGas Mitigated | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 298.5526 | 298.5526 | 5.7200e-003 | 5.4700e-003 | 300.3267 |
| NaturalGas Unmitigated | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 298.5526 | 298.5526 | 5.7200e-003 | 5.4700e-003 | 300.3267 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | 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 | 5.59466e+006 | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 298.5526 | 298.5526 | 5.7200e-003 | 5.4700e-003 | 300.3267 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0302** | **0.2578** | **0.1097** | **1.6500e-003** | | **0.0208** | **0.0208** | | **0.0208** | **0.0208** | **0.0000** | **298.5526** | **298.5526** | **5.7200e-003** | **5.4700e-003** | **300.3267** |

**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 | 5.59466e+006 | 0.0302 | 0.2578 | 0.1097 | 1.6500e-003 | | 0.0208 | 0.0208 | | 0.0208 | 0.0208 | 0.0000 | 298.5526 | 298.5526 | 5.7200e-003 | 5.4700e-003 | 300.3267 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **0.0302** | **0.2578** | **0.1097** | **1.6500e-003** | | **0.0208** | **0.0208** | | **0.0208** | **0.0208** | **0.0000** | **298.5526** | **298.5526** | **5.7200e-003** | **5.4700e-003** | **300.3267** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.54044e+006 | 273.1909 | 0.0231 | 2.7900e-003 | 274.6002 |
| City Park | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 76580 | 13.5811 | 1.1500e-003 | 1.4000e-004 | 13.6512 |
| **Total** | | **286.7720** | **0.0242** | **2.9300e-003** | **288.2514** |

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Apartments Mid Rise | 1.12053e+006 | 198.7216 | 0.0168 | 2.0300e-003 | 199.7468 |
| City Park | -419911 | -74.4693 | -0.0063 | -0.0008 | -74.8535 |
| Parking Lot | -343331 | -60.8882 | -0.0051 | -0.0006 | -61.2023 |
| **Total** | | **63.3641** | **5.3400e-003** | **6.5000e-004** | **63.6910** |

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

| | ROG | NOx | CO | SO2 | Fugitive 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 | 1.6151 | 0.1093 | 3.0808 | 6.0000e-004 | | 0.0225 | 0.0225 | | 0.0225 | 0.0225 | 0.0000 | 88.6648 | 88.6648 | 4.9100e-003 | 1.5400e-003 | 89.2469 |
| Unmitigated | 2.9376 | 0.1471 | 6.4877 | 6.5200e-003 | | 0.3937 | 0.3937 | | 0.3937 | 0.3937 | 41.3192 | 85.9679 | 127.2871 | 0.1295 | 2.8000e-003 | 131.3612 |

### 6.2 Area by SubCategory

**Unmitigated**

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.1217 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.4208 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 1.2742 | 0.1009 | 2.4728 | 6.3100e-003 | | 0.3714 | 0.3714 | | 0.3714 | 0.3714 | 41.3192 | 79.4013 | 120.7206 | 0.1232 | 2.8000e-003 | 124.6368 |
| Landscaping | 0.1210 | 0.0462 | 4.0148 | 2.1000e-004 | | 0.0223 | 0.0223 | | 0.0223 | 0.0223 | 0.0000 | 6.5666 | 6.5666 | 6.3100e-003 | 0.0000 | 6.7243 |
| **Total** | **2.9376** | **0.1471** | **6.4877** | **6.5200e-003** | | **0.3937** | **0.3937** | | **0.3937** | **0.3937** | **41.3192** | **85.9679** | **127.2871** | **0.1295** | **2.8000e-003** | **131.3612** |

**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 | 0.1217 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 1.4208 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Hearth | 8.5000e-003 | 0.0726 | 0.0309 | 4.6000e-004 | | 5.8700e-003 | 5.8700e-003 | | 5.8700e-003 | 5.8700e-003 | 0.0000 | 84.0720 | 84.0720 | 1.6100e-003 | 1.5400e-003 | 84.5716 |
| Landscaping | 0.0641 | 0.0367 | 3.0499 | 1.4000e-004 | | 0.0166 | 0.0166 | | 0.0166 | 0.0166 | 0.0000 | 4.5928 | 4.5928 | 3.3000e-003 | 0.0000 | 4.6753 |
| **Total** | **1.6151** | **0.1093** | **3.0808** | **6.0000e-004** | | **0.0225** | **0.0225** | | **0.0225** | **0.0225** | **0.0000** | **88.6648** | **88.6648** | **4.9100e-003** | **1.5400e-003** | **89.2469** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Use Water Efficient Irrigation System

LMC Murrieta Apartments - Riverside-South Coast County, Annual

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

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |
| Mitigated | 88.2608 | 0.6676 | 0.0164 | 109.8491 |
| Unmitigated | 103.8484 | 0.8340 | 0.0205 | 130.8004 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 25.3449 / 15.9783 | 98.0499 | 0.8335 | 0.0204 | 124.9720 |
| City Park | 0 / 2.94296 | 5.7985 | 4.9000e-004 | 6.0000e-005 | 5.8285 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **103.8484** | **0.8340** | **0.0205** | **130.8004** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Apartments Mid Rise | 20.2759 / 15.0036 | 82.8159 | 0.6671 | 0.0164 | 104.3762 |
| City Park | 0 / 2.76344 | 5.4448 | 4.6000e-004 | 6.0000e-005 | 5.4729 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **88.2608** | **0.6676** | **0.0164** | **109.8491** |

## 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 18.1829 | 1.0746 | 0.0000 | 45.0474 |
| Unmitigated | 36.3658 | 2.1492 | 0.0000 | 90.0948 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 178.94 | 36.3232 | 2.1466 | 0.0000 | 89.9892 |
| City Park | 0.21 | 0.0426 | 2.5200e-003 | 0.0000 | 0.1056 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **36.3658** | **2.1492** | **0.0000** | **90.0948** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Apartments Mid Rise | 89.47 | 18.1616 | 1.0733 | 0.0000 | 44.9946 |

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

| | | | | | |
|---|---|---|---|---|---|
| City Park | 0.105 | 0.0213 | 1.2600e-003 | 0.0000 | 0.0528 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **18.1829** | **1.0746** | **0.0000** | **45.0474** |

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

# LMC Murrieta Apartments

**Riverside-South Coast County, Summer**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Apartments Mid Rise | 389.00 | Dwelling Unit | 5.61 | 389,000.00 | 1113 |
| City Park | 2.47 | Acre | 2.47 | 107,593.20 | 0 |
| Parking Lot | 547.00 | Space | 4.92 | 218,800.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.4 | **Precipitation Freq (Days)** | 28 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - City Park = landscaping. Total parking is 80 spaces, with 253 included in the apartment building footprint. Therefore, 547 total parkng spaces were modeled to represent surface parking areas.

Construction Phase - Construction dates from construction plans.

Grading - contractor provided

Vehicle Trips - Per Traffic Study

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

Trips and VMT -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 6 |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0 | 12 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 20.00 | 86.00 |
| tblConstructionPhase | NumDays | 300.00 | 609.00 |
| tblConstructionPhase | NumDays | 30.00 | 87.00 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblConstructionPhase | NumDays | 10.00 | 22.00 |
| tblGrading | MaterialImported | 0.00 | 4,600.00 |
| tblLandUse | LotAcreage | 10.24 | 5.61 |
| tblVehicleTrips | ST_TR | 4.91 | 6.76 |
| tblVehicleTrips | SU_TR | 4.09 | 6.76 |
| tblVehicleTrips | WD_TR | 5.44 | 6.76 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.4062 | 35.0830 | 28.9285 | 0.0669 | 19.8582 | 1.4318 | 21.1252 | 10.1558 | 1.3175 | 11.3214 | 0.0000 | 6,519.6057 | 6,519.6057 | 1.9532 | 0.0531 | 6,584.2440 |
| 2024 | 2.4719 | 15.3794 | 26.3437 | 0.0608 | 3.3987 | 0.6392 | 4.0380 | 0.9075 | 0.6012 | 1.5087 | 0.0000 | 6,071.2356 | 6,071.2356 | 0.6708 | 0.1741 | 6,139.8793 |
| 2025 | 2.3050 | 14.3359 | 25.6004 | 0.0598 | 3.3987 | 0.5528 | 3.9515 | 0.9075 | 0.5199 | 1.4274 | 0.0000 | 5,991.1465 | 5,991.1465 | 0.6620 | 0.1678 | 6,057.6944 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 32.1450 | 24.1177 | 43.5638 | 0.0910 | 4.1923 | 1.0253 | 5.2176 | 1.1179 | 0.9587 | 2.0767 | 0.0000 | 9,067.2970 | 9,067.2970 | 1.3985 | 0.1758 | 9,154.6383 |
| **Maximum** | **32.1450** | **35.0830** | **43.5638** | **0.0910** | **19.8582** | **1.4318** | **21.1252** | **10.1558** | **1.3175** | **11.3214** | **0.0000** | **9,067.2970** | **9,067.2970** | **1.9532** | **0.1758** | **9,154.6383** |

**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 | | | | | |
| 2023 | 3.4062 | 35.0830 | 28.9285 | 0.0669 | 8.5941 | 1.4318 | 9.8610 | 4.3696 | 1.3175 | 5.5352 | 0.0000 | 6,519.6057 | 6,519.6057 | 1.9532 | 0.0531 | 6,584.2440 |
| 2024 | 2.4719 | 15.3794 | 26.3437 | 0.0608 | 3.2240 | 0.6392 | 3.8632 | 0.8646 | 0.6012 | 1.4658 | 0.0000 | 6,071.2356 | 6,071.2356 | 0.6708 | 0.1741 | 6,139.8793 |
| 2025 | 2.3050 | 14.3359 | 25.6004 | 0.0598 | 3.2240 | 0.5528 | 3.7768 | 0.8646 | 0.5199 | 1.3845 | 0.0000 | 5,991.1465 | 5,991.1465 | 0.6620 | 0.1678 | 6,057.6944 |
| 2026 | 32.1450 | 24.1177 | 43.5638 | 0.0910 | 3.9762 | 1.0253 | 5.0015 | 1.0649 | 0.9587 | 2.0236 | 0.0000 | 9,067.2970 | 9,067.2970 | 1.3985 | 0.1758 | 9,154.6383 |
| **Maximum** | **32.1450** | **35.0830** | **43.5638** | **0.0910** | **8.5941** | **1.4318** | **9.8610** | **4.3696** | **1.3175** | **5.5352** | **0.0000** | **9,067.2970** | **9,067.2970** | **1.9532** | **0.1758** | **9,154.6383** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **38.35** | **0.00** | **34.46** | **45.27** | **0.00** | **36.27** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

**Unmitigated Operational**

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 111.3519 | 8.4409 | 229.9452 | 0.5064 | | 29.8932 | 29.8932 | | 29.8932 | 29.8932 | 3,643.7313 | 7,059.9071 | 10,703.6384 | 10.9220 | 0.2473 | 11,050.3860 |
| Energy | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| Mobile | 7.5362 | 9.4629 | 73.6611 | 0.1744 | 18.9804 | 0.1314 | 19.1118 | 5.0629 | 0.1231 | 5.1860 | | 18,320.0282 | 18,320.0282 | 0.8304 | 0.8030 | 18,580.0799 |
| **Total** | **119.0534** | **19.3164** | **304.2074** | **0.6898** | **18.9804** | **30.1388** | **49.1192** | **5.0629** | **30.1305** | **35.1934** | **3,643.7313** | **27,183.2114** | **30,826.9426** | **11.7869** | **1.0834** | **31,444.4579** |

**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 | 9.6448 | 6.1010 | 26.8706 | 0.0382 | | 0.6023 | 0.6023 | | 0.6023 | 0.6023 | 0.0000 | 7,454.3837 | 7,454.3837 | 0.1712 | 0.1359 | 7,499.1684 |
| Energy | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| Mobile | 7.2169 | 8.7245 | 67.4639 | 0.1574 | 17.0824 | 0.1192 | 17.2016 | 4.5566 | 0.1117 | 4.6683 | | 16,533.0522 | 16,533.0522 | 0.7708 | 0.7376 | 16,772.1281 |
| **Total** | **17.0269** | **16.2381** | **94.9355** | **0.2046** | **17.0824** | **0.8357** | **17.9181** | **4.5566** | **0.8282** | **5.3848** | **0.0000** | **25,790.7120** | **25,790.7120** | **0.9766** | **0.9066** | **26,085.2887** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **85.70** | **15.94** | **68.79** | **70.34** | **10.00** | **97.23** | **63.52** | **10.00** | **97.25** | **84.70** | **100.00** | **5.12** | **16.34** | **91.71** | **16.32** | **17.04** |

## 3.0 Construction Detail

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/1/2023 | 8/30/2023 | 5 | 22 | |
| 2 | Grading | Grading | 8/31/2023 | 12/31/2023 | 5 | 87 | |
| 3 | Building Construction | Building Construction | 1/1/2024 | 4/30/2026 | 5 | 609 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2026 | 4/30/2026 | 5 | 86 | |
| 5 | Paving | Paving | 2/28/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 33**

**Acres of Grading (Grading Phase): 261**

**Acres of Paving: 4.92**

**Residential Indoor: 787,725; Residential Outdoor: 262,575; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | |
|---|---|---|---|---|---|
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 455.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 280.00 | 42.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 56.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Site Preparation - 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 | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

**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 | 0.0658 | 0.0406 | 0.6603 | 1.7700e-003 | 0.2012 | 9.4000e-004 | 0.2021 | 0.0534 | 8.7000e-004 | 0.0542 | | 181.1165 | 181.1165 | 4.1400e-003 | 4.2200e-003 | 182.4783 |
| **Total** | **0.0658** | **0.0406** | **0.6603** | **1.7700e-003** | **0.2012** | **9.4000e-004** | **0.2021** | **0.0534** | **8.7000e-004** | **0.0542** | | **181.1165** | **181.1165** | **4.1400e-003** | **4.2200e-003** | **182.4783** |

**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 | | | | | 8.4034 | 0.0000 | 8.4034 | 4.3188 | 0.0000 | 4.3188 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **8.4034** | **1.2660** | **9.6694** | **4.3188** | **1.1647** | **5.4835** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

**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 | 0.0658 | 0.0406 | 0.6603 | 1.7700e-003 | 0.1907 | 9.4000e-004 | 0.1917 | 0.0508 | 8.7000e-004 | 0.0517 | | 181.1165 | 181.1165 | 4.1400e-003 | 4.2200e-003 | 182.4783 |
| **Total** | **0.0658** | **0.0406** | **0.6603** | **1.7700e-003** | **0.1907** | **9.4000e-004** | **0.1917** | **0.0508** | **8.7000e-004** | **0.0517** | | **181.1165** | **181.1165** | **4.1400e-003** | **4.2200e-003** | **182.4783** |

## 3.3 Grading - 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 | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

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LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

## 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 | 0.0114 | 0.5223 | 0.1436 | 2.8700e-003 | 0.0915 | 6.3000e-003 | 0.0978 | 0.0251 | 6.0300e-003 | 0.0311 | | 306.8874 | 306.8874 | 4.3500e-003 | 0.0484 | 321.4068 |
| 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 | 0.0731 | 0.0452 | 0.7337 | 1.9700e-003 | 0.2236 | 1.0500e-003 | 0.2246 | 0.0593 | 9.7000e-004 | 0.0603 | | 201.2406 | 201.2406 | 4.5900e-003 | 4.6900e-003 | 202.7537 |
| **Total** | **0.0845** | **0.5674** | **0.8773** | **4.8400e-003** | **0.3151** | **7.3500e-003** | **0.3224** | **0.0844** | **7.0000e-003** | **0.0914** | | **508.1280** | **508.1280** | **8.9400e-003** | **0.0531** | **524.1604** |

## 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 | | | | | 3.9345 | 0.0000 | 3.9345 | 1.5620 | 0.0000 | 1.5620 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **3.9345** | **1.4245** | **5.3590** | **1.5620** | **1.3105** | **2.8725** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0114 | 0.5223 | 0.1436 | 2.8700e-003 | 0.0874 | 6.3000e-003 | 0.0937 | 0.0241 | 6.0300e-003 | 0.0301 | | 306.8874 | 306.8874 | 4.3500e-003 | 0.0484 | 321.4068 |
| 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 | 0.0731 | 0.0452 | 0.7337 | 1.9700e-003 | 0.2119 | 1.0500e-003 | 0.2129 | 0.0564 | 9.7000e-004 | 0.0574 | | 201.2406 | 201.2406 | 4.5900e-003 | 4.6900e-003 | 202.7537 |
| **Total** | **0.0845** | **0.5674** | **0.8773** | **4.8400e-003** | **0.2993** | **7.3500e-003** | **0.3066** | **0.0805** | **7.0000e-003** | **0.0875** | | **508.1280** | **508.1280** | **8.9400e-003** | **0.0531** | **524.1604** |

## 3.4 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 | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

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

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| 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 | 0.0466 | 1.3723 | 0.5585 | 7.2200e-003 | 0.2690 | 0.0119 | 0.2809 | 0.0775 | 0.0114 | 0.0888 | | 766.1454 | 766.1454 | 8.2100e-003 | 0.1130 | 800.0375 |
| Worker | 0.9537 | 0.5633 | 9.6183 | 0.0267 | 3.1297 | 0.0140 | 3.1438 | 0.8300 | 0.0129 | 0.8429 | | 2,749.3913 | 2,749.3913 | 0.0583 | 0.0610 | 2,769.0342 |
| **Total** | **1.0003** | **1.9356** | **10.1768** | **0.0339** | **3.3987** | **0.0259** | **3.4247** | **0.9075** | **0.0243** | **0.9318** | | **3,515.5367** | **3,515.5367** | **0.0665** | **0.1741** | **3,569.0717** |

**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 | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

**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 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0466 | 1.3723 | 0.5585 | 7.2200e-003 | 0.2575 | 0.0119 | 0.2694 | 0.0746 | 0.0114 | 0.0860 | | 766.1454 | 766.1454 | 8.2100e-003 | 0.1130 | 800.0375 |
| Worker | 0.9537 | 0.5633 | 9.6183 | 0.0267 | 2.9665 | 0.0140 | 2.9805 | 0.7900 | 0.0129 | 0.8029 | | 2,749.3913 | 2,749.3913 | 0.0583 | 0.0610 | 2,769.0342 |
| **Total** | **1.0003** | **1.9356** | **10.1768** | **0.0339** | **3.2240** | **0.0259** | **3.2499** | **0.8646** | **0.0243** | **0.8889** | | **3,515.5367** | **3,515.5367** | **0.0665** | **0.1741** | **3,569.0717** |

## 3.4 Building Construction - 2025

### 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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### 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 | 0.0460 | 1.3610 | 0.5522 | 7.0900e-003 | 0.2690 | 0.0119 | 0.2809 | 0.0775 | 0.0114 | 0.0888 | | 752.6404 | 752.6404 | 8.5200e-003 | 0.1108 | 785.8802 |
| Worker | 0.8916 | 0.5053 | 8.9635 | 0.0257 | 3.1297 | 0.0133 | 3.1431 | 0.8300 | 0.0123 | 0.8423 | | 2,682.0318 | 2,682.0318 | 0.0525 | 0.0570 | 2,700.3162 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.9376** | **1.8662** | **9.5157** | **0.0328** | **3.3987** | **0.0252** | **3.4240** | **0.9075** | **0.0236** | **0.9311** | | **3,434.6722** | **3,434.6722** | **0.0610** | **0.1678** | **3,486.1964** |

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**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 | 0.0460 | 1.3610 | 0.5522 | 7.0900e-003 | 0.2575 | 0.0119 | 0.2694 | 0.0746 | 0.0114 | 0.0860 | | 752.6404 | 752.6404 | 8.5200e-003 | 0.1108 | 785.8802 |
| Worker | 0.8916 | 0.5053 | 8.9635 | 0.0257 | 2.9665 | 0.0133 | 2.9798 | 0.7900 | 0.0123 | 0.8022 | | 2,682.0318 | 2,682.0318 | 0.0525 | 0.0570 | 2,700.3162 |
| **Total** | **0.9376** | **1.8662** | **9.5157** | **0.0328** | **3.2240** | **0.0252** | **3.2492** | **0.8646** | **0.0236** | **0.8882** | | **3,434.6722** | **3,434.6722** | **0.0610** | **0.1678** | **3,486.1964** |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

## 3.4 Building Construction - 2026

### 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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### 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 | 0.0454 | 1.3474 | 0.5469 | 6.9600e-003 | 0.2690 | 0.0118 | 0.2808 | 0.0775 | 0.0113 | 0.0888 | | 738.9469 | 738.9469 | 8.8200e-003 | 0.1086 | 771.5305 |
| Worker | 0.8376 | 0.4575 | 8.4121 | 0.0249 | 3.1297 | 0.0127 | 3.1424 | 0.8300 | 0.0116 | 0.8417 | | 2,619.4619 | 2,619.4619 | 0.0476 | 0.0536 | 2,636.6189 |
| **Total** | **0.8831** | **1.8048** | **8.9590** | **0.0319** | **3.3987** | **0.0245** | **3.4232** | **0.9075** | **0.0230** | **0.9304** | | **3,358.4088** | **3,358.4088** | **0.0564** | **0.1622** | **3,408.1493** |

### Mitigated Construction On-Site

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**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 | 0.0454 | 1.3474 | 0.5469 | 6.9600e-003 | 0.2575 | 0.0118 | 0.2693 | 0.0746 | 0.0113 | 0.0860 | | 738.9469 | 738.9469 | 8.8200e-003 | 0.1086 | 771.5305 |
| Worker | 0.8376 | 0.4575 | 8.4121 | 0.0249 | 2.9665 | 0.0127 | 2.9791 | 0.7900 | 0.0116 | 0.8016 | | 2,619.4619 | 2,619.4619 | 0.0476 | 0.0536 | 2,636.6189 |
| **Total** | **0.8831** | **1.8048** | **8.9590** | **0.0319** | **3.2240** | **0.0245** | **3.2485** | **0.8646** | **0.0230** | **0.8875** | | **3,358.4088** | **3,358.4088** | **0.0564** | **0.1622** | **3,408.1493** |

## 3.5 Architectural Coating - 2026

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

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 28.3031 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **28.4740** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

## 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 | 0.1675 | 0.0915 | 1.6824 | 4.9900e-003 | 0.6260 | 2.5300e-003 | 0.6285 | 0.1660 | 2.3300e-003 | 0.1683 | | 523.8924 | 523.8924 | 9.5200e-003 | 0.0107 | 527.3238 |
| **Total** | **0.1675** | **0.0915** | **1.6824** | **4.9900e-003** | **0.6260** | **2.5300e-003** | **0.6285** | **0.1660** | **2.3300e-003** | **0.1683** | | **523.8924** | **523.8924** | **9.5200e-003** | **0.0107** | **527.3238** |

## 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 | | | | | |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 28.3031 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **28.4740** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**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 | 0.1675 | 0.0915 | 1.6824 | 4.9900e-003 | 0.5933 | 2.5300e-003 | 0.5958 | 0.1580 | 2.3300e-003 | 0.1603 | | 523.8924 | 523.8924 | 9.5200e-003 | 0.0107 | 527.3238 |
| **Total** | **0.1675** | **0.0915** | **1.6824** | **4.9900e-003** | **0.5933** | **2.5300e-003** | **0.5958** | **0.1580** | **2.3300e-003** | **0.1603** | | **523.8924** | **523.8924** | **9.5200e-003** | **0.0107** | **527.3238** |

### 3.6 Paving - 2026

**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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.2930 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.2081** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**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 | 0.0449 | 0.0245 | 0.4507 | 1.3400e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 140.3283 | 140.3283 | 2.5500e-003 | 2.8700e-003 | 141.2474 |
| **Total** | **0.0449** | **0.0245** | **0.4507** | **1.3400e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **140.3283** | **140.3283** | **2.5500e-003** | **2.8700e-003** | **141.2474** |

**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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.2930 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.2081** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**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 | 0.0449 | 0.0245 | 0.4507 | 1.3400e-003 | 0.1589 | 6.8000e-004 | 0.1596 | 0.0423 | 6.2000e-004 | 0.0429 | | 140.3283 | 140.3283 | 2.5500e-003 | 2.8700e-003 | 141.2474 |
| **Total** | **0.0449** | **0.0245** | **0.4507** | **1.3400e-003** | **0.1589** | **6.8000e-004** | **0.1596** | **0.0423** | **6.2000e-004** | **0.0429** | | **140.3283** | **140.3283** | **2.5500e-003** | **2.8700e-003** | **141.2474** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 7.2169 | 8.7245 | 67.4639 | 0.1574 | 17.0824 | 0.1192 | 17.2016 | 4.5566 | 0.1117 | 4.6683 | | 16,533.0522 | 16,533.0522 | 0.7708 | 0.7376 | 16,772.1281 |
| Unmitigated | 7.5362 | 9.4629 | 73.6611 | 0.1744 | 18.9804 | 0.1314 | 19.1118 | 5.0629 | 0.1231 | 5.1860 | | 18,320.0282 | 18,320.0283 | 0.8304 | 0.8030 | 18,580.0790 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 2,629.64 | 2,629.64 | 2629.64 | 8,985,879 | 8,087,291 |
| Total | 2,629.64 | 2,629.64 | 2,629.64 | 8,985,879 | 8,087,291 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.542916 | 0.056689 | 0.174450 | 0.134041 | 0.024680 | 0.006960 | 0.011589 | 0.018600 | 0.000608 | 0.000298 | 0.023389 | 0.001091 | 0.004689 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| NaturalGas Unmitigated | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |

## 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 | 15327.8 | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| **Total** | | **0.1653** | **1.4126** | **0.6011** | **9.0200e-003** | | **0.1142** | **0.1142** | | **0.1142** | **0.1142** | | **1,803.2761** | **1,803.2761** | **0.0346** | **0.0331** | **1,813.9921** |

### 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 | 15.3278 | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| **Total** | | **0.1653** | **1.4126** | **0.6011** | **9.0200e-003** | | **0.1142** | **0.1142** | | **0.1142** | **0.1142** | | **1,803.2761** | **1,803.2761** | **0.0346** | **0.0331** | **1,813.9921** |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 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 | 9.6448 | 6.1010 | 26.8706 | 0.0382 | | 0.6023 | 0.6023 | | 0.6023 | 0.6023 | 0.0000 | 7,454.3837 | 7,454.3837 | 0.1712 | 0.1359 | 7,499.1684 |
| Unmitigated | 111.3519 | 8.4409 | 229.9452 | 0.5064 | | 29.8932 | 29.8932 | | 29.8932 | 29.8932 | 3,643.7313 | 7,059.9071 | 10,703.6384 | 10.9220 | 0.2473 | 11,050.3860 |

### 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 | 0.6669 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 7.7852 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 101.9320 | 8.0711 | 197.8267 | 0.5047 | | 29.7151 | 29.7151 | | 29.7151 | 29.7151 | 3,643.7313 | 7,002.0000 | 10,645.7313 | 10.8663 | 0.2473 | 10,991.0876 |
| Landscaping | 0.9678 | 0.3698 | 32.1185 | 1.7000e-003 | | 0.1781 | 0.1781 | | 0.1781 | 0.1781 | | 57.9071 | 57.9071 | 0.0557 | | 59.2984 |
| **Total** | **111.3519** | **8.4409** | **229.9452** | **0.5064** | | **29.8932** | **29.8932** | | **29.8932** | **29.8932** | **3,643.7313** | **7,059.9071** | **10,703.6384** | **10.9220** | **0.2473** | **11,050.3860** |

**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 | 0.6669 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7852 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.6796 | 5.8075 | 2.4713 | 0.0371 | | 0.4696 | 0.4696 | | 0.4696 | 0.4696 | 0.0000 | 7,413.8824 | 7,413.8824 | 0.1421 | 0.1359 | 7,457.9394 |
| Landscaping | 0.5130 | 0.2935 | 24.3993 | 1.1000e-003 | | 0.1327 | 0.1327 | | 0.1327 | 0.1327 | | 40.5013 | 40.5013 | 0.0291 | | 41.2291 |
| **Total** | **9.6448** | **6.1010** | **26.8706** | **0.0382** | | **0.6023** | **0.6023** | | **0.6023** | **0.6023** | **0.0000** | **7,454.3837** | **7,454.3837** | **0.1712** | **0.1359** | **7,499.1684** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

LMC Murrieta Apartments - Riverside-South Coast County, Summer

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

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

# LMC Murrieta Apartments

**Riverside-South Coast County, Winter**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Apartments Mid Rise | 389.00 | Dwelling Unit | 5.61 | 389,000.00 | 1113 |
| City Park | 2.47 | Acre | 2.47 | 107,593.20 | 0 |
| Parking Lot | 547.00 | Space | 4.92 | 218,800.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.4 | **Precipitation Freq (Days)** | 28 |
| **Climate Zone** | 10 | | | **Operational Year** | 2026 |
| **Utility Company** | Southern California Edison | | | | |
| **CO2 Intensity (lb/MWhr)** | 390.98 | **CH4 Intensity (lb/MWhr)** | 0.033 | **N2O Intensity (lb/MWhr)** | 0.004 |

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

Project Characteristics -

Land Use - City Park = landscaping. Total parking is 80 spaces, with 253 included in the apartment building footprint. Therefore, 547 total parkng spaces were modeled to represent surface parking areas.

Construction Phase - Construction dates from construction plans.

Grading - contractor provided

Vehicle Trips - Per Traffic Study

Construction Off-road Equipment Mitigation - SCAQMD rule compliance

Mobile Land Use Mitigation -

Area Mitigation -

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

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Trips and VMT -

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstDustMitigation | CleanPavedRoadPercentReduction | 0 | 6 |
| tblConstDustMitigation | WaterUnpavedRoadMoistureContent | 0 | 12 |
| tblConstDustMitigation | WaterUnpavedRoadVehicleSpeed | 0 | 15 |
| tblConstructionPhase | NumDays | 20.00 | 86.00 |
| tblConstructionPhase | NumDays | 300.00 | 609.00 |
| tblConstructionPhase | NumDays | 30.00 | 87.00 |
| tblConstructionPhase | NumDays | 20.00 | 44.00 |
| tblConstructionPhase | NumDays | 10.00 | 22.00 |
| tblGrading | MaterialImported | 0.00 | 4,600.00 |
| tblLandUse | LotAcreage | 10.24 | 5.61 |
| tblVehicleTrips | ST_TR | 4.91 | 6.76 |
| tblVehicleTrips | SU_TR | 4.09 | 6.76 |
| tblVehicleTrips | WD_TR | 5.44 | 6.76 |

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | lb/day | | | | | | | | | | lb/day | | | | | |
| 2023 | 3.4007 | 35.1159 | 28.7936 | 0.0668 | 19.8582 | 1.4319 | 21.1252 | 10.1558 | 1.3175 | 11.3214 | 0.0000 | 6,501.1871 | 6,501.1871 | 1.9531 | 0.0532 | 6,565.8793 |
| 2024 | 2.4113 | 15.4834 | 24.5582 | 0.0583 | 3.3987 | 0.6393 | 4.0380 | 0.9075 | 0.6012 | 1.5087 | 0.0000 | 5,815.4189 | 5,815.4189 | 0.6706 | 0.1759 | 5,884.5896 |
| 2025 | 2.2505 | 14.4370 | 23.9471 | 0.0574 | 3.3987 | 0.5528 | 3.9516 | 0.9075 | 0.5199 | 1.4274 | 0.0000 | 5,742.2539 | 5,742.2539 | 0.6619 | 0.1695 | 5,809.2985 |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2026 | 32.0844 | 24.2204 | 41.6236 | 0.0881 | 4.1923 | 1.0253 | 5.2177 | 1.1179 | 0.9588 | 2.0767 | 0.0000 | 8,762.7269 | 8,762.7269 | 1.3986 | 0.1777 | 8,850.6323 |
| **Maximum** | **32.0844** | **35.1159** | **41.6236** | **0.0881** | **19.8582** | **1.4319** | **21.1252** | **10.1558** | **1.3175** | **11.3214** | **0.0000** | **8,762.7269** | **8,762.7269** | **1.9531** | **0.1777** | **8,850.6323** |

**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 | | | | | |
| 2023 | 3.4007 | 35.1159 | 28.7936 | 0.0668 | 8.5941 | 1.4319 | 9.8610 | 4.3696 | 1.3175 | 5.5352 | 0.0000 | 6,501.1871 | 6,501.1871 | 1.9531 | 0.0532 | 6,565.8793 |
| 2024 | 2.4113 | 15.4834 | 24.5582 | 0.0583 | 3.2240 | 0.6393 | 3.8633 | 0.8646 | 0.6012 | 1.4658 | 0.0000 | 5,815.4189 | 5,815.4189 | 0.6706 | 0.1759 | 5,884.5896 |
| 2025 | 2.2505 | 14.4370 | 23.9471 | 0.0574 | 3.2240 | 0.5528 | 3.7768 | 0.8646 | 0.5199 | 1.3845 | 0.0000 | 5,742.2539 | 5,742.2539 | 0.6619 | 0.1695 | 5,809.2985 |
| 2026 | 32.0844 | 24.2204 | 41.6236 | 0.0881 | 3.9762 | 1.0253 | 5.0015 | 1.0649 | 0.9588 | 2.0236 | 0.0000 | 8,762.7269 | 8,762.7269 | 1.3986 | 0.1777 | 8,850.6323 |
| **Maximum** | **32.0844** | **35.1159** | **41.6236** | **0.0881** | **8.5941** | **1.4319** | **9.8610** | **4.3696** | **1.3175** | **5.5352** | **0.0000** | **8,762.7269** | **8,762.7269** | **1.9531** | **0.1777** | **8,850.6323** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **38.35** | **0.00** | **34.46** | **45.27** | **0.00** | **36.27** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 2.2 Overall Operational

**Unmitigated Operational**

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Area | 111.3519 | 8.4409 | 229.9452 | 0.5064 | | 29.8932 | 29.8932 | | 29.8932 | 29.8932 | 3,643.7313 | 7,059.9071 | 10,703.6384 | 10.9220 | 0.2473 | 11,050.3860 |
| Energy | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| Mobile | 6.4087 | 10.0530 | 65.2872 | 0.1620 | 18.9804 | 0.1315 | 19.1119 | 5.0629 | 0.1232 | 5.1861 | | 17,012.1764 | 17,012.1764 | 0.8485 | 0.8197 | 17,277.6578 |
| **Total** | **117.9259** | **19.9065** | **295.8335** | **0.6773** | **18.9804** | **30.1389** | **49.1193** | **5.0629** | **30.1306** | **35.1935** | **3,643.7313** | **25,875.3596** | **29,519.0908** | **11.8050** | **1.1001** | **30,142.0358** |

**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 | 9.6448 | 6.1010 | 26.8706 | 0.0382 | | 0.6023 | 0.6023 | | 0.6023 | 0.6023 | 0.0000 | 7,454.3837 | 7,454.3837 | 0.1712 | 0.1359 | 7,499.1684 |
| Energy | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| Mobile | 6.0944 | 9.2681 | 60.0854 | 0.1462 | 17.0824 | 0.1193 | 17.2017 | 4.5566 | 0.1118 | 4.6684 | | 15,356.7202 | 15,356.7202 | 0.7906 | 0.7531 | 15,600.9025 |
| **Total** | **15.9045** | **16.7817** | **87.5571** | **0.1934** | **17.0824** | **0.8358** | **17.9182** | **4.5566** | **0.8283** | **5.3849** | **0.0000** | **24,614.3799** | **24,614.3799** | **0.9964** | **0.9221** | **24,914.0630** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **86.51** | **15.70** | **70.40** | **71.45** | **10.00** | **97.23** | **63.52** | **10.00** | **97.25** | **84.70** | **100.00** | **4.87** | **16.62** | **91.56** | **16.18** | **17.34** |

## 3.0 Construction Detail

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

## Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 8/1/2023 | 8/30/2023 | 5 | 22 | |
| 2 | Grading | Grading | 8/31/2023 | 12/31/2023 | 5 | 87 | |
| 3 | Building Construction | Building Construction | 1/1/2024 | 4/30/2026 | 5 | 609 | |
| 4 | Architectural Coating | Architectural Coating | 1/1/2026 | 4/30/2026 | 5 | 86 | |
| 5 | Paving | Paving | 2/28/2026 | 4/30/2026 | 5 | 44 | |

**Acres of Grading (Site Preparation Phase): 33**

**Acres of Grading (Grading Phase): 261**

**Acres of Paving: 4.92**

**Residential Indoor: 787,725; Residential Outdoor: 262,575; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 247 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 2 | 8.00 | 158 | 0.38 |
| Grading | Graders | 1 | 8.00 | 187 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 247 | 0.40 |
| Grading | Scrapers | 2 | 8.00 | 367 | 0.48 |
| Grading | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 231 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

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| | | | | | |
|---|---|---|---|---|---|
| Paving | Pavers | 2 | 8.00 | 130 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 132 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |

**Trips and VMT**

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 8 | 20.00 | 0.00 | 455.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 280.00 | 42.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 56.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 14.70 | 6.90 | 20.00 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

## 3.2 Site Preparation - 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 | | | | | |
| Fugitive Dust | | | | | 19.6570 | 0.0000 | 19.6570 | 10.1025 | 0.0000 | 10.1025 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |

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| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **19.6570** | **1.2660** | **20.9230** | **10.1025** | **1.1647** | **11.2672** | | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0616 | 0.0422 | 0.5362 | 1.6000e-003 | 0.2012 | 9.4000e-004 | 0.2021 | 0.0534 | 8.7000e-004 | 0.0542 | | 164.1079 | 164.1079 | 4.1200e-003 | 4.3200e-003 | 165.4988 |
| **Total** | **0.0616** | **0.0422** | **0.5362** | **1.6000e-003** | **0.2012** | **9.4000e-004** | **0.2021** | **0.0534** | **8.7000e-004** | **0.0542** | | **164.1079** | **164.1079** | **4.1200e-003** | **4.3200e-003** | **165.4988** |

**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 | | | | | 8.4034 | 0.0000 | 8.4034 | 4.3188 | 0.0000 | 4.3188 | | | 0.0000 | | | 0.0000 |
| Off-Road | 2.6595 | 27.5242 | 18.2443 | 0.0381 | | 1.2660 | 1.2660 | | 1.1647 | 1.1647 | 0.0000 | 3,687.3081 | 3,687.3081 | 1.1926 | | 3,717.1219 |
| **Total** | **2.6595** | **27.5242** | **18.2443** | **0.0381** | **8.4034** | **1.2660** | **9.6694** | **4.3188** | **1.1647** | **5.4835** | **0.0000** | **3,687.3081** | **3,687.3081** | **1.1926** | | **3,717.1219** |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 0.0616 | 0.0422 | 0.5362 | 1.6000e-003 | 0.1907 | 9.4000e-004 | 0.1917 | 0.0508 | 8.7000e-004 | 0.0517 | | 164.1079 | 164.1079 | 4.1200e-003 | 4.3200e-003 | 165.4988 |
| **Total** | **0.0616** | **0.0422** | **0.5362** | **1.6000e-003** | **0.1907** | **9.4000e-004** | **0.1917** | **0.0508** | **8.7000e-004** | **0.0517** | | **164.1079** | **164.1079** | **4.1200e-003** | **4.3200e-003** | **165.4988** |

## 3.3 Grading - 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 | | | | | |
| Fugitive Dust | | | | | 9.2036 | 0.0000 | 9.2036 | 3.6538 | 0.0000 | 3.6538 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **9.2036** | **1.4245** | **10.6281** | **3.6538** | **1.3105** | **4.9643** | | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

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LMC Murrieta Apartments - Riverside-South Coast County, Winter

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## 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 | 0.0105 | 0.5534 | 0.1466 | 2.8800e-003 | 0.0915 | 6.3100e-003 | 0.0978 | 0.0251 | 6.0400e-003 | 0.0311 | | 307.3673 | 307.3673 | 4.3100e-003 | 0.0484 | 321.9082 |
| 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 | 0.0685 | 0.0469 | 0.5958 | 1.7800e-003 | 0.2236 | 1.0500e-003 | 0.2246 | 0.0593 | 9.7000e-004 | 0.0603 | | 182.3421 | 182.3421 | 4.5800e-003 | 4.8000e-003 | 183.8876 |
| **Total** | **0.0790** | **0.6003** | **0.7424** | **4.6600e-003** | **0.3151** | **7.3600e-003** | **0.3224** | **0.0844** | **7.0100e-003** | **0.0914** | | **489.7094** | **489.7094** | **8.8900e-003** | **0.0532** | **505.7958** |

## 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 | | | | | 3.9345 | 0.0000 | 3.9345 | 1.5620 | 0.0000 | 1.5620 | | | 0.0000 | | | 0.0000 |
| Off-Road | 3.3217 | 34.5156 | 28.0512 | 0.0621 | | 1.4245 | 1.4245 | | 1.3105 | 1.3105 | 0.0000 | 6,011.4777 | 6,011.4777 | 1.9442 | | 6,060.0836 |
| **Total** | **3.3217** | **34.5156** | **28.0512** | **0.0621** | **3.9345** | **1.4245** | **5.3590** | **1.5620** | **1.3105** | **2.8725** | **0.0000** | **6,011.4777** | **6,011.4777** | **1.9442** | | **6,060.0836** |

## Mitigated Construction Off-Site

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Hauling | 0.0105 | 0.5534 | 0.1466 | 2.8800e-003 | 0.0874 | 6.3100e-003 | 0.0937 | 0.0241 | 6.0400e-003 | 0.0301 | | 307.3673 | 307.3673 | 4.3100e-003 | 0.0484 | 321.9082 |
| 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 | 0.0685 | 0.0469 | 0.5958 | 1.7800e-003 | 0.2119 | 1.0500e-003 | 0.2129 | 0.0564 | 9.7000e-004 | 0.0574 | | 182.3421 | 182.3421 | 4.5800e-003 | 4.8000e-003 | 183.8876 |
| **Total** | **0.0790** | **0.6003** | **0.7424** | **4.6600e-003** | **0.2993** | **7.3600e-003** | **0.3066** | **0.0805** | **7.0100e-003** | **0.0875** | | **489.7094** | **489.7094** | **8.8900e-003** | **0.0532** | **505.7958** |

## 3.4 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 | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

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

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LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0431 | 1.4554 | 0.5775 | 7.2400e-003 | 0.2690 | 0.0119 | 0.2809 | 0.0775 | 0.0114 | 0.0889 | 768.0601 | 768.0601 | 8.0600e-003 | 0.1134 | 802.0598 | |
| Worker | 0.8967 | 0.5843 | 7.8139 | 0.0242 | 3.1297 | 0.0140 | 3.1438 | 0.8300 | 0.0129 | 0.8429 | 2,491.6599 | 2,491.6599 | 0.0582 | 0.0624 | 2,511.7221 | |
| **Total** | **0.9398** | **2.0397** | **8.3914** | **0.0314** | **3.3987** | **0.0259** | **3.4247** | **0.9075** | **0.0243** | **0.9318** | **3,259.7200** | **3,259.7200** | **0.0662** | **0.1759** | **3,313.7819** | |

## 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 | 1.4716 | 13.4438 | 16.1668 | 0.0270 | | 0.6133 | 0.6133 | | 0.5769 | 0.5769 | 0.0000 | 2,555.6989 | 2,555.6989 | 0.6044 | | 2,570.8077 |
| **Total** | **1.4716** | **13.4438** | **16.1668** | **0.0270** | | **0.6133** | **0.6133** | | **0.5769** | **0.5769** | **0.0000** | **2,555.6989** | **2,555.6989** | **0.6044** | | **2,570.8077** |

## 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 | |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.0431 | 1.4554 | 0.5775 | 7.2400e-003 | 0.2575 | 0.0119 | 0.2694 | 0.0746 | 0.0114 | 0.0860 | | 768.0601 | 768.0601 | 8.0600e-003 | 0.1134 | 802.0598 |
| Worker | 0.8967 | 0.5843 | 7.8139 | 0.0242 | 2.9665 | 0.0140 | 2.9805 | 0.7900 | 0.0129 | 0.8029 | | 2,491.6599 | 2,491.6599 | 0.0582 | 0.0624 | 2,511.7221 |
| **Total** | **0.9398** | **2.0397** | **8.3914** | **0.0314** | **3.2240** | **0.0259** | **3.2499** | **0.8646** | **0.0243** | **0.8889** | | **3,259.7200** | **3,259.7200** | **0.0662** | **0.1759** | **3,313.7819** |

## 3.4 Building Construction - 2025

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**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 | 0.0425 | 1.4435 | 0.5712 | 7.1100e-003 | 0.2690 | 0.0119 | 0.2809 | 0.0775 | 0.0114 | 0.0889 | | 754.5322 | 754.5322 | 8.3600e-003 | 0.1112 | 787.8770 |
| Worker | 0.8406 | 0.5239 | 7.2913 | 0.0233 | 3.1297 | 0.0133 | 3.1431 | 0.8300 | 0.0123 | 0.8423 | | 2,431.2473 | 2,431.2473 | 0.0526 | 0.0583 | 2,449.9234 |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.8831** | **1.9674** | **7.8625** | **0.0305** | **3.3987** | **0.0253** | **3.4240** | **0.9075** | **0.0237** | **0.9312** | | **3,185.7795** | **3,185.7795** | **0.0610** | **0.1695** | **3,237.8004** |

**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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**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 | 0.0425 | 1.4435 | 0.5712 | 7.1100e-003 | 0.2575 | 0.0119 | 0.2694 | 0.0746 | 0.0114 | 0.0860 | | 754.5322 | 754.5322 | 8.3600e-003 | 0.1112 | 787.8770 |
| Worker | 0.8406 | 0.5239 | 7.2913 | 0.0233 | 2.9665 | 0.0133 | 2.9798 | 0.7900 | 0.0123 | 0.8022 | | 2,431.2473 | 2,431.2473 | 0.0526 | 0.0583 | 2,449.9234 |
| **Total** | **0.8831** | **1.9674** | **7.8625** | **0.0305** | **3.2240** | **0.0253** | **3.2493** | **0.8646** | **0.0237** | **0.8883** | | **3,185.7795** | **3,185.7795** | **0.0610** | **0.1695** | **3,237.8004** |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

## 3.4 Building Construction - 2026

### 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 | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

### 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 | 0.0420 | 1.4291 | 0.5659 | 6.9800e-003 | 0.2690 | 0.0119 | 0.2809 | 0.0775 | 0.0114 | 0.0888 | | 740.8123 | 740.8123 | 8.6600e-003 | 0.1090 | 773.4984 |
| Worker | 0.7921 | 0.4742 | 6.8492 | 0.0226 | 3.1297 | 0.0127 | 3.1424 | 0.8300 | 0.0116 | 0.8417 | | 2,375.0119 | 2,375.0119 | 0.0478 | 0.0548 | 2,392.5371 |
| **Total** | **0.8341** | **1.9033** | **7.4151** | **0.0296** | **3.3987** | **0.0245** | **3.4233** | **0.9075** | **0.0230** | **0.9305** | | **3,115.8242** | **3,115.8242** | **0.0564** | **0.1638** | **3,166.0355** |

### Mitigated Construction On-Site

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Off-Road | 1.3674 | 12.4697 | 16.0847 | 0.0270 | | 0.5276 | 0.5276 | | 0.4963 | 0.4963 | 0.0000 | 2,556.4744 | 2,556.4744 | 0.6010 | | 2,571.4981 |
| **Total** | **1.3674** | **12.4697** | **16.0847** | **0.0270** | | **0.5276** | **0.5276** | | **0.4963** | **0.4963** | **0.0000** | **2,556.4744** | **2,556.4744** | **0.6010** | | **2,571.4981** |

**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 | 0.0420 | 1.4291 | 0.5659 | 6.9800e-003 | 0.2575 | 0.0119 | 0.2694 | 0.0746 | 0.0114 | 0.0860 | | 740.8123 | 740.8123 | 8.6600e-003 | 0.1090 | 773.4984 |
| Worker | 0.7921 | 0.4742 | 6.8492 | 0.0226 | 2.9665 | 0.0127 | 2.9791 | 0.7900 | 0.0116 | 0.8016 | | 2,375.0119 | 2,375.0119 | 0.0478 | 0.0548 | 2,392.5371 |
| **Total** | **0.8341** | **1.9033** | **7.4151** | **0.0296** | **3.2240** | **0.0245** | **3.2485** | **0.8646** | **0.0230** | **0.8876** | | **3,115.8242** | **3,115.8242** | **0.0564** | **0.1638** | **3,166.0355** |

## 3.5 Architectural Coating - 2026

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

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| Category | lb/day | | | | | | | | | | lb/day | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 28.3031 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **28.4740** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**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 | 0.1584 | 0.0948 | 1.3699 | 4.5200e-003 | 0.6260 | 2.5300e-003 | 0.6285 | 0.1660 | 2.3300e-003 | 0.1683 | | 475.0024 | 475.0024 | 9.5600e-003 | 0.0110 | 478.5074 |
| **Total** | **0.1584** | **0.0948** | **1.3699** | **4.5200e-003** | **0.6260** | **2.5300e-003** | **0.6285** | **0.1660** | **2.3300e-003** | **0.1683** | | **475.0024** | **475.0024** | **9.5600e-003** | **0.0110** | **478.5074** |

**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 | | | | | |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Archit. Coating | 28.3031 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Off-Road | 0.1709 | 1.1455 | 1.8091 | 2.9700e-003 | | 0.0515 | 0.0515 | | 0.0515 | 0.0515 | 0.0000 | 281.4481 | 281.4481 | 0.0154 | | 281.8319 |
| **Total** | **28.4740** | **1.1455** | **1.8091** | **2.9700e-003** | | **0.0515** | **0.0515** | | **0.0515** | **0.0515** | **0.0000** | **281.4481** | **281.4481** | **0.0154** | | **281.8319** |

**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 | 0.1584 | 0.0948 | 1.3699 | 4.5200e-003 | 0.5933 | 2.5300e-003 | 0.5958 | 0.1580 | 2.3300e-003 | 0.1603 | | 475.0024 | 475.0024 | 9.5600e-003 | 0.0110 | 478.5074 |
| **Total** | **0.1584** | **0.0948** | **1.3699** | **4.5200e-003** | **0.5933** | **2.5300e-003** | **0.5958** | **0.1580** | **2.3300e-003** | **0.1603** | | **475.0024** | **475.0024** | **9.5600e-003** | **0.0110** | **478.5074** |

## 3.6 Paving - 2026

**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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Paving | 0.2930 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| **Total** | **1.2081** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

## 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 | 0.0424 | 0.0254 | 0.3669 | 1.2100e-003 | 0.1677 | 6.8000e-004 | 0.1683 | 0.0445 | 6.2000e-004 | 0.0451 | | 127.2328 | 127.2328 | 2.5600e-003 | 2.9400e-003 | 128.1716 |
| **Total** | **0.0424** | **0.0254** | **0.3669** | **1.2100e-003** | **0.1677** | **6.8000e-004** | **0.1683** | **0.0445** | **6.2000e-004** | **0.0451** | | **127.2328** | **127.2328** | **2.5600e-003** | **2.9400e-003** | **128.1716** |

## 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 | 0.9152 | 8.5816 | 14.5780 | 0.0228 | | 0.4185 | 0.4185 | | 0.3850 | 0.3850 | 0.0000 | 2,206.7452 | 2,206.7452 | 0.7137 | | 2,224.5878 |
| Paving | 0.2930 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.2081** | **8.5816** | **14.5780** | **0.0228** | | **0.4185** | **0.4185** | | **0.3850** | **0.3850** | **0.0000** | **2,206.7452** | **2,206.7452** | **0.7137** | | **2,224.5878** |

**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 | 0.0424 | 0.0254 | 0.3669 | 1.2100e-003 | 0.1589 | 6.8000e-004 | 0.1596 | 0.0423 | 6.2000e-004 | 0.0429 | | 127.2328 | 127.2328 | 2.5600e-003 | 2.9400e-003 | 128.1716 |
| **Total** | **0.0424** | **0.0254** | **0.3669** | **1.2100e-003** | **0.1589** | **6.8000e-004** | **0.1596** | **0.0423** | **6.2000e-004** | **0.0429** | | **127.2328** | **127.2328** | **2.5600e-003** | **2.9400e-003** | **128.1716** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

Increase Density

Improve Destination Accessibility

Increase Transit Accessibility

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| Mitigated | 6.0944 | 9.2681 | 60.0854 | 0.1462 | 17.0824 | 0.1193 | 17.2017 | 4.5566 | 0.1118 | 4.6684 | | 15,356.7202 | 15,356.7202 | 0.7906 | 0.7531 | 15,600.9025 |
| Unmitigated | 6.4087 | 10.0530 | 65.2872 | 0.1620 | 18.9804 | 0.1315 | 19.1119 | 5.0629 | 0.1232 | 5.1861 | | 17,012.1764 | 17,012.1764 | 0.8485 | 0.8197 | 17,277.6578 |

## 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Apartments Mid Rise | 2,629.64 | 2,629.64 | 2629.64 | 8,985,879 | 8,087,291 |
| Total | 2,629.64 | 2,629.64 | 2,629.64 | 8,985,879 | 8,087,291 |

## 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | 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 |

## 4.4 Fleet Mix

| Land Use | LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | 0.542916 | 0.056689 | 0.174450 | 0.134041 | 0.024680 | 0.006960 | 0.011589 | 0.018600 | 0.000608 | 0.000298 | 0.023389 | 0.001091 | 0.004689 |

# 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

Kilowatt Hours of Renewable Electricity Generated

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | lb/day | | | | | | | | | | lb/day | | | | | |
| NaturalGas Mitigated | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| NaturalGas Unmitigated | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |

## 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 | 15327.8 | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| **Total** | | **0.1653** | **1.4126** | **0.6011** | **9.0200e-003** | | **0.1142** | **0.1142** | | **0.1142** | **0.1142** | | **1,803.2761** | **1,803.2761** | **0.0346** | **0.0331** | **1,813.9921** |

**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 | 15.3278 | 0.1653 | 1.4126 | 0.6011 | 9.0200e-003 | | 0.1142 | 0.1142 | | 0.1142 | 0.1142 | | 1,803.2761 | 1,803.2761 | 0.0346 | 0.0331 | 1,813.9921 |
| **Total** | | **0.1653** | **1.4126** | **0.6011** | **9.0200e-003** | | **0.1142** | **0.1142** | | **0.1142** | **0.1142** | | **1,803.2761** | **1,803.2761** | **0.0346** | **0.0331** | **1,813.9921** |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

## 6.0 Area Detail

### 6.1 Mitigation Measures Area

Use Electric Lawnmower

Use Electric Leafblower

Use Electric Chainsaw

Use only Natural Gas Hearths

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 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 | 9.6448 | 6.1010 | 26.8706 | 0.0382 | | 0.6023 | 0.6023 | | 0.6023 | 0.6023 | 0.0000 | 7,454.3837 | 7,454.3837 | 0.1712 | 0.1359 | 7,499.1684 |
| Unmitigated | 111.3519 | 8.4409 | 229.9452 | 0.5064 | | 29.8932 | 29.8932 | | 29.8932 | 29.8932 | 3,643.7313 | 7,059.9071 | 10,703.6384 | 10.9220 | 0.2473 | 11,050.3860 |

### 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 | 0.6669 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer Products | 7.7852 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 101.9320 | 8.0711 | 197.8267 | 0.5047 | | 29.7151 | 29.7151 | | 29.7151 | 29.7151 | 3,643.7313 | 7,002.0000 | 10,645.7313 | 10.8663 | 0.2473 | 10,991.0876 |
| Landscaping | 0.9678 | 0.3698 | 32.1185 | 1.7000e-003 | | 0.1781 | 0.1781 | | 0.1781 | 0.1781 | | 57.9071 | 57.9071 | 0.0557 | | 59.2984 |
| **Total** | **111.3519** | **8.4409** | **229.9452** | **0.5064** | | **29.8932** | **29.8932** | | **29.8932** | **29.8932** | **3,643.7313** | **7,059.9071** | **10,703.6384** | **10.9220** | **0.2473** | **11,050.3860** |

**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 | 0.6669 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Consumer Products | 7.7852 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | | 0.0000 | | | 0.0000 |
| Hearth | 0.6796 | 5.8075 | 2.4713 | 0.0371 | | 0.4696 | 0.4696 | | 0.4696 | 0.4696 | 0.0000 | 7,413.8824 | 7,413.8824 | 0.1421 | 0.1359 | 7,457.9394 |
| Landscaping | 0.5130 | 0.2935 | 24.3993 | 1.1000e-003 | | 0.1327 | 0.1327 | | 0.1327 | 0.1327 | | 40.5013 | 40.5013 | 0.0291 | | 41.2291 |
| **Total** | **9.6448** | **6.1010** | **26.8706** | **0.0382** | | **0.6023** | **0.6023** | | **0.6023** | **0.6023** | **0.0000** | **7,454.3837** | **7,454.3837** | **0.1712** | **0.1359** | **7,499.1684** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

LMC Murrieta Apartments - Riverside-South Coast County, Winter

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

Install Low Flow Shower

Use Water Efficient Irrigation System

## 8.0 Waste Detail

### 8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

## 9.0 Operational Offroad

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

## 10.0 Stationary Equipment

**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

## 11.0 Vegetation