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# **Appendix A**

## Air Quality Modeling Runs



## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## RCCD Solar Plan Project - Norco College

## Riverside-South Coast County, Summer

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 6.00 | Acre   | 6.00        | 261,360.00         | 0          |

**1.2 Other Project Characteristics**

|                         |                            |                         |       |                           |       |
|-------------------------|----------------------------|-------------------------|-------|---------------------------|-------|
| Urbanization            | Urban                      | Wind Speed (m/s)        | 2.4   | Precipitation Freq (Days) | 28    |
| Climate Zone            | 10                         |                         |       | Operational Year          | 2023  |
| Utility Company         | Southern California Edison |                         |       |                           |       |
| CO2 Intensity (lb/MWhr) | 390.98                     | CH4 Intensity (lb/MWhr) | 0.033 | N2O Intensity (lb/MWhr)   | 0.004 |

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

Project Characteristics - Norco College solar construction

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value  |
|----------------------|----------------|---------------|------------|
| tblConstructionPhase | NumDays        | 230.00        | 41.00      |
| tblConstructionPhase | NumDays        | 20.00         | 10.00      |
| tblConstructionPhase | NumDays        | 10.00         | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 32.00      |
| tblConstructionPhase | PhaseEndDate   | 9/29/2023     | 2/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 10/14/2022    | 10/28/2022 |
| tblConstructionPhase | PhaseEndDate   | 8/16/2024     | 3/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 7/4/2025      | 4/26/2023  |
| tblConstructionPhase | PhaseStartDate | 11/12/2022    | 12/17/2022 |
| tblConstructionPhase | PhaseStartDate | 10/15/2022    | 10/29/2022 |
| tblConstructionPhase | PhaseStartDate | 9/30/2023     | 2/14/2023  |
| tblConstructionPhase | PhaseStartDate | 8/17/2024     | 3/14/2023  |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00     |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00      |
| tblOffRoadEquipment  | LoadFactor     | 0.41          | 0.41       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |
| tblOffRoadEquipment  | LoadFactor     | 0.43          | 0.43       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.50 | 0.50                    |
| tblOffRoadEquipment | LoadFactor                 | 0.44 | 0.44                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

|                     |                            |        |       |
|---------------------|----------------------------|--------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.5073 | 16.0996 | 13.0776 | 0.0234 | 7.3574        | 0.6802       | 8.0375     | 3.4988         | 0.6259        | 4.1247      | 0.0000   | 2,309.185<br>2 | 2,309.185<br>2 | 0.5784 | 0.0778 | 2,339.059<br>8 |
| 2023    | 0.6049 | 6.1964  | 7.4259  | 0.0226 | 0.5817        | 0.1936       | 0.7497     | 0.1584         | 0.1783        | 0.3293      | 0.0000   | 2,244.345<br>4 | 2,244.345<br>4 | 0.4792 | 0.0851 | 2,278.421<br>6 |
| Maximum | 1.5073 | 16.0996 | 13.0776 | 0.0234 | 7.3574        | 0.6802       | 8.0375     | 3.4988         | 0.6259        | 4.1247      | 0.0000   | 2,309.185<br>2 | 2,309.185<br>2 | 0.5784 | 0.0851 | 2,339.059<br>8 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.5073 | 16.0996 | 13.0776 | 0.0234 | 3.4620        | 0.6802       | 4.1421     | 1.6152         | 0.6259        | 2.2411      | 0.0000   | 2,309.185<br>2 | 2,309.185<br>2 | 0.5784 | 0.0778 | 2,339.059<br>8 |
| 2023    | 0.6049 | 6.1964  | 7.4259  | 0.0226 | 0.5817        | 0.1936       | 0.7497     | 0.1584         | 0.1783        | 0.3293      | 0.0000   | 2,244.345<br>4 | 2,244.345<br>4 | 0.4792 | 0.0851 | 2,278.421<br>6 |
| Maximum | 1.5073 | 16.0996 | 13.0776 | 0.0234 | 3.4620        | 0.6802       | 4.1421     | 1.6152         | 0.6259        | 2.2411      | 0.0000   | 2,309.185<br>2 | 2,309.185<br>2 | 0.5784 | 0.0851 | 2,339.059<br>8 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 49.07         | 0.00         | 44.33      | 51.51          | 0.00          | 42.29       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1125        | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |               | 1.4000e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.4000e-003</b> |

Mitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1125        | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |               | 1.4000e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.4000e-003</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

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

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name               | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|--------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation         | Site Preparation      | 10/1/2022  | 10/28/2022 | 5             | 20       |                   |
| 2            | Grading                  | Grading               | 10/29/2022 | 11/11/2022 | 5             | 10       |                   |
| 3            | Boring/Conduit           | Trenching             | 11/12/2022 | 12/16/2022 | 5             | 25       |                   |
| 4            | Racking/Other Mechanical | Building Construction | 12/17/2022 | 2/13/2023  | 5             | 41       |                   |
| 5            | PV Panel Installation    | Building Construction | 2/14/2023  | 3/13/2023  | 5             | 20       |                   |
| 6            | Other Electrical         | Building Construction | 3/14/2023  | 4/26/2023  | 5             | 32       |                   |

**Acres of Grading (Site Preparation Phase): 20****Acres of Grading (Grading Phase): 5****Acres of Paving: 6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| Other Electrical         | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts              | 0      | 8.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts              | 0      | 8.00        | 89          | 0.20        |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| Racking/Other Mechanical | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Grading                  | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Grading                  | Excavators                | 0 | 8.00 | 158 | 0.38 |
| Other Electrical         | Forklifts                 | 0 | 8.00 | 89  | 0.20 |
| PV Panel Installation    | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Other Electrical         | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Grading                  | Rubber Tired Dozers       | 0 | 8.00 | 247 | 0.40 |
| Site Preparation         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Other Electrical         | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Grading                  | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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 |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4155        | 15.7102        | 7.5362        | 0.0182        |               | 0.6742        | 0.6742        |                | 0.6202        | 0.6202        |          | 1,767.5199        | 1,767.5199        | 0.5717        |     | 1,781.8112        |
| <b>Total</b>  | <b>1.4155</b> | <b>15.7102</b> | <b>7.5362</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.6742</b> | <b>7.7568</b> | <b>3.4247</b>  | <b>0.6202</b> | <b>4.0450</b> |          | <b>1,767.5199</b> | <b>1,767.5199</b> | <b>0.5717</b> |     | <b>1,781.8112</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.0788        | 0.0511        | 0.7962        | 2.0300e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 205.3788        | 205.3788        | 5.1200e-003        | 5.0800e-003   | 207.0218        |
| <b>Total</b> | <b>0.0918</b> | <b>0.3894</b> | <b>0.9138</b> | <b>3.4900e-003</b> | <b>0.2748</b> | <b>5.9900e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.6900e-003</b> | <b>0.0797</b> |          | <b>359.7351</b> | <b>359.7351</b> | <b>6.7500e-003</b> | <b>0.0280</b> | <b>368.2403</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4155        | 15.7102        | 7.5362        | 0.0182        |               | 0.6742        | 0.6742        |                | 0.6202        | 0.6202        | 0.0000        | 1,767.5199        | 1,767.5199        | 0.5717        |     | 1,781.8112        |
| <b>Total</b>  | <b>1.4155</b> | <b>15.7102</b> | <b>7.5362</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.6742</b> | <b>3.8613</b> | <b>1.5411</b>  | <b>0.6202</b> | <b>2.1614</b> | <b>0.0000</b> | <b>1,767.5199</b> | <b>1,767.5199</b> | <b>0.5717</b> |     | <b>1,781.8112</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.0788        | 0.0511        | 0.7962        | 2.0300e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 205.3788        | 205.3788        | 5.1200e-003        | 5.0800e-003   | 207.0218        |
| <b>Total</b> | <b>0.0918</b> | <b>0.3894</b> | <b>0.9138</b> | <b>3.4900e-003</b> | <b>0.2748</b> | <b>5.9900e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.6900e-003</b> | <b>0.0797</b> |          | <b>359.7351</b> | <b>359.7351</b> | <b>6.7500e-003</b> | <b>0.0280</b> | <b>368.2403</b> |

## 3.3 Grading - 2022

Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.5303        | 0.0000        | 0.5303        | 0.0573         | 0.0000        | 0.0573        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.7439        | 8.6373        | 5.7965        | 0.0123        |               | 0.3555        | 0.3555        |                | 0.3271        | 0.3271        |          | 1,193.4120        | 1,193.4120        | 0.3860        |     | 1,203.0613        |
| <b>Total</b>  | <b>0.7439</b> | <b>8.6373</b> | <b>5.7965</b> | <b>0.0123</b> | <b>0.5303</b> | <b>0.3555</b> | <b>0.8858</b> | <b>0.0573</b>  | <b>0.3271</b> | <b>0.3843</b> |          | <b>1,193.4120</b> | <b>1,193.4120</b> | <b>0.3860</b> |     | <b>1,203.0613</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.3 Grading - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 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       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.1103        | 0.0715        | 1.1147        | 2.8400e-003        | 0.3130        | 1.5600e-003        | 0.3145        | 0.0830         | 1.4300e-003        | 0.0844        |          | 287.5303        | 287.5303        | 7.1700e-003        | 7.1200e-003   | 289.8306        |
| <b>Total</b> | <b>0.1233</b> | <b>0.4098</b> | <b>1.2323</b> | <b>4.3000e-003</b> | <b>0.3642</b> | <b>6.4400e-003</b> | <b>0.3707</b> | <b>0.0978</b>  | <b>6.1000e-003</b> | <b>0.1039</b> |          | <b>441.8866</b> | <b>441.8866</b> | <b>8.8000e-003</b> | <b>0.0300</b> | <b>451.0490</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.2386        | 0.0000        | 0.2386        | 0.0258         | 0.0000        | 0.0258        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.7439        | 8.6373        | 5.7965        | 0.0123        |               | 0.3555        | 0.3555        |                | 0.3271        | 0.3271        | 0.0000        | 1,193.4120        | 1,193.4120        | 0.3860        |     | 1,203.0613        |
| <b>Total</b>  | <b>0.7439</b> | <b>8.6373</b> | <b>5.7965</b> | <b>0.0123</b> | <b>0.2386</b> | <b>0.3555</b> | <b>0.5941</b> | <b>0.0258</b>  | <b>0.3271</b> | <b>0.3529</b> | <b>0.0000</b> | <b>1,193.4120</b> | <b>1,193.4120</b> | <b>0.3860</b> |     | <b>1,203.0613</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.3 Grading - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 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       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.1103        | 0.0715        | 1.1147        | 2.8400e-003        | 0.3130        | 1.5600e-003        | 0.3145        | 0.0830         | 1.4300e-003        | 0.0844        |          | 287.5303        | 287.5303        | 7.1700e-003        | 7.1200e-003   | 289.8306        |
| <b>Total</b> | <b>0.1233</b> | <b>0.4098</b> | <b>1.2323</b> | <b>4.3000e-003</b> | <b>0.3642</b> | <b>6.4400e-003</b> | <b>0.3707</b> | <b>0.0978</b>  | <b>6.1000e-003</b> | <b>0.1039</b> |          | <b>441.8866</b> | <b>441.8866</b> | <b>8.8000e-003</b> | <b>0.0300</b> | <b>451.0490</b> |

## 3.4 Boring/Conduit - 2022

Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.9950        | 10.0421        | 11.7277        | 0.0177        |               | 0.5192        | 0.5192        |                | 0.4777        | 0.4777        |          | 1,712.9423        | 1,712.9423        | 0.5540        |     | 1,726.7923        |
| <b>Total</b> | <b>0.9950</b> | <b>10.0421</b> | <b>11.7277</b> | <b>0.0177</b> |               | <b>0.5192</b> | <b>0.5192</b> |                | <b>0.4777</b> | <b>0.4777</b> |          | <b>1,712.9423</b> | <b>1,712.9423</b> | <b>0.5540</b> |     | <b>1,726.7923</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.4 Boring/Conduit - 2022****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0260        | 0.6766        | 0.2353        | 2.9100e-003        | 0.1025        | 9.7500e-003   | 0.1122        | 0.0295         | 9.3300e-003   | 0.0388        |          | 308.7125        | 308.7125        | 3.2700e-003   | 0.0458        | 322.4369        |
| Worker       | 0.1103        | 0.0715        | 1.1147        | 2.8400e-003        | 0.3130        | 1.5600e-003   | 0.3145        | 0.0830         | 1.4300e-003   | 0.0844        |          | 287.5303        | 287.5303        | 7.1700e-003   | 7.1200e-003   | 289.8306        |
| <b>Total</b> | <b>0.1364</b> | <b>0.7481</b> | <b>1.3499</b> | <b>5.7500e-003</b> | <b>0.4155</b> | <b>0.0113</b> | <b>0.4268</b> | <b>0.1125</b>  | <b>0.0108</b> | <b>0.1233</b> |          | <b>596.2429</b> | <b>596.2429</b> | <b>0.0104</b> | <b>0.0529</b> | <b>612.2675</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.9950        | 10.0421        | 11.7277        | 0.0177        |               | 0.5192        | 0.5192        |                | 0.4777        | 0.4777        | 0.0000        | 1,712.9423        | 1,712.9423        | 0.5540        |     | 1,726.7923        |
| <b>Total</b> | <b>0.9950</b> | <b>10.0421</b> | <b>11.7277</b> | <b>0.0177</b> |               | <b>0.5192</b> | <b>0.5192</b> |                | <b>0.4777</b> | <b>0.4777</b> | <b>0.0000</b> | <b>1,712.9423</b> | <b>1,712.9423</b> | <b>0.5540</b> |     | <b>1,726.7923</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.4 Boring/Conduit - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0260        | 0.6766        | 0.2353        | 2.9100e-003        | 0.1025        | 9.7500e-003   | 0.1122        | 0.0295         | 9.3300e-003   | 0.0388        |          | 308.7125        | 308.7125        | 3.2700e-003   | 0.0458        | 322.4369        |
| Worker       | 0.1103        | 0.0715        | 1.1147        | 2.8400e-003        | 0.3130        | 1.5600e-003   | 0.3145        | 0.0830         | 1.4300e-003   | 0.0844        |          | 287.5303        | 287.5303        | 7.1700e-003   | 7.1200e-003   | 289.8306        |
| <b>Total</b> | <b>0.1364</b> | <b>0.7481</b> | <b>1.3499</b> | <b>5.7500e-003</b> | <b>0.4155</b> | <b>0.0113</b> | <b>0.4268</b> | <b>0.1125</b>  | <b>0.0108</b> | <b>0.1233</b> |          | <b>596.2429</b> | <b>596.2429</b> | <b>0.0104</b> | <b>0.0529</b> | <b>612.2675</b> |

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4740        | 5.0973        | 5.8045        | 0.0149        |               | 0.2109        | 0.2109        |                | 0.1941        | 0.1941        |          | 1,439.7134        | 1,439.7134        | 0.4656        |     | 1,451.3542        |
| <b>Total</b> | <b>0.4740</b> | <b>5.0973</b> | <b>5.8045</b> | <b>0.0149</b> |               | <b>0.2109</b> | <b>0.2109</b> |                | <b>0.1941</b> | <b>0.1941</b> |          | <b>1,439.7134</b> | <b>1,439.7134</b> | <b>0.4656</b> |     | <b>1,451.3542</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0391        | 1.0149        | 0.3529        | 4.3700e-003        | 0.1537        | 0.0146        | 0.1684        | 0.0443         | 0.0140        | 0.0583        |          | 463.0688        | 463.0688        | 4.9000e-003   | 0.0687        | 483.6553        |
| Worker       | 0.1418        | 0.0919        | 1.4332        | 3.6600e-003        | 0.4024        | 2.0000e-003   | 0.4044        | 0.1067         | 1.8400e-003   | 0.1086        |          | 369.6818        | 369.6818        | 9.2200e-003   | 9.1500e-003   | 372.6393        |
| <b>Total</b> | <b>0.1809</b> | <b>1.1068</b> | <b>1.7860</b> | <b>8.0300e-003</b> | <b>0.5561</b> | <b>0.0166</b> | <b>0.5728</b> | <b>0.1510</b>  | <b>0.0158</b> | <b>0.1668</b> |          | <b>832.7507</b> | <b>832.7507</b> | <b>0.0141</b> | <b>0.0778</b> | <b>856.2946</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4740        | 5.0973        | 5.8045        | 0.0149        |               | 0.2109        | 0.2109        |                | 0.1941        | 0.1941        | 0.0000        | 1,439.7134        | 1,439.7134        | 0.4656        |     | 1,451.3542        |
| <b>Total</b> | <b>0.4740</b> | <b>5.0973</b> | <b>5.8045</b> | <b>0.0149</b> |               | <b>0.2109</b> | <b>0.2109</b> |                | <b>0.1941</b> | <b>0.1941</b> | <b>0.0000</b> | <b>1,439.7134</b> | <b>1,439.7134</b> | <b>0.4656</b> |     | <b>1,451.3542</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.5 Racking/Other Mechanical - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0391        | 1.0149        | 0.3529        | 4.3700e-003        | 0.1537        | 0.0146        | 0.1684        | 0.0443         | 0.0140        | 0.0583        |          | 463.0688        | 463.0688        | 4.9000e-003   | 0.0687        | 483.6553        |
| Worker       | 0.1418        | 0.0919        | 1.4332        | 3.6600e-003        | 0.4024        | 2.0000e-003   | 0.4044        | 0.1067         | 1.8400e-003   | 0.1086        |          | 369.6818        | 369.6818        | 9.2200e-003   | 9.1500e-003   | 372.6393        |
| <b>Total</b> | <b>0.1809</b> | <b>1.1068</b> | <b>1.7860</b> | <b>8.0300e-003</b> | <b>0.5561</b> | <b>0.0166</b> | <b>0.5728</b> | <b>0.1510</b>  | <b>0.0158</b> | <b>0.1668</b> |          | <b>832.7507</b> | <b>832.7507</b> | <b>0.0141</b> | <b>0.0778</b> | <b>856.2946</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4464        | 4.6687        | 5.7859        | 0.0149        |               | 0.1848        | 0.1848        |                | 0.1701        | 0.1701        |          | 1,441.9485        | 1,441.9485        | 0.4664        |     | 1,453.6074        |
| <b>Total</b> | <b>0.4464</b> | <b>4.6687</b> | <b>5.7859</b> | <b>0.0149</b> |               | <b>0.1848</b> | <b>0.1848</b> |                | <b>0.1701</b> | <b>0.1701</b> |          | <b>1,441.9485</b> | <b>1,441.9485</b> | <b>0.4664</b> |     | <b>1,453.6074</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0271        | 0.7841        | 0.3229        | 4.1900e-003        | 0.1537        | 6.8300e-003        | 0.1606        | 0.0443         | 6.5300e-003        | 0.0508        |          | 444.6504        | 444.6504        | 4.5300e-003   | 0.0657        | 464.3442        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1585</b> | <b>0.8653</b> | <b>1.6400</b> | <b>7.7300e-003</b> | <b>0.5561</b> | <b>8.7100e-003</b> | <b>0.5648</b> | <b>0.1510</b>  | <b>8.2600e-003</b> | <b>0.1592</b> |          | <b>802.3969</b> | <b>802.3969</b> | <b>0.0128</b> | <b>0.0742</b> | <b>824.8142</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4464        | 4.6687        | 5.7859        | 0.0149        |               | 0.1848        | 0.1848        |                | 0.1701        | 0.1701        | 0.0000        | 1,441.9485        | 1,441.9485        | 0.4664        |     | 1,453.6074        |
| <b>Total</b> | <b>0.4464</b> | <b>4.6687</b> | <b>5.7859</b> | <b>0.0149</b> |               | <b>0.1848</b> | <b>0.1848</b> |                | <b>0.1701</b> | <b>0.1701</b> | <b>0.0000</b> | <b>1,441.9485</b> | <b>1,441.9485</b> | <b>0.4664</b> |     | <b>1,453.6074</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.5 Racking/Other Mechanical - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0271        | 0.7841        | 0.3229        | 4.1900e-003        | 0.1537        | 6.8300e-003        | 0.1606        | 0.0443         | 6.5300e-003        | 0.0508        |          | 444.6504        | 444.6504        | 4.5300e-003   | 0.0657        | 464.3442        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1585</b> | <b>0.8653</b> | <b>1.6400</b> | <b>7.7300e-003</b> | <b>0.5561</b> | <b>8.7100e-003</b> | <b>0.5648</b> | <b>0.1510</b>  | <b>8.2600e-003</b> | <b>0.1592</b> |          | <b>802.3969</b> | <b>802.3969</b> | <b>0.0128</b> | <b>0.0742</b> | <b>824.8142</b> |

## 3.6 PV Panel Installation - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        |          | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> |          | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.6 PV Panel Installation - 2023****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0316        | 0.9148        | 0.3767        | 4.8900e-003        | 0.1793        | 7.9700e-003        | 0.1873        | 0.0516         | 7.6200e-003        | 0.0593        |          | 518.7588        | 518.7588        | 5.2900e-003   | 0.0767        | 541.7348        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1630</b> | <b>0.9960</b> | <b>1.6938</b> | <b>8.4300e-003</b> | <b>0.5817</b> | <b>9.8500e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3500e-003</b> | <b>0.1677</b> |          | <b>876.5053</b> | <b>876.5053</b> | <b>0.0136</b> | <b>0.0851</b> | <b>902.2049</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        | 0.0000        | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> | <b>0.0000</b> | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0316        | 0.9148        | 0.3767        | 4.8900e-003        | 0.1793        | 7.9700e-003        | 0.1873        | 0.0516         | 7.6200e-003        | 0.0593        |          | 518.7588        | 518.7588        | 5.2900e-003   | 0.0767        | 541.7348        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1630</b> | <b>0.9960</b> | <b>1.6938</b> | <b>8.4300e-003</b> | <b>0.5817</b> | <b>9.8500e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3500e-003</b> | <b>0.1677</b> |          | <b>876.5053</b> | <b>876.5053</b> | <b>0.0136</b> | <b>0.0851</b> | <b>902.2049</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        |          | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> |          | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.5100e-003   | 0.1307        | 0.0538        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.1084         | 74.1084         | 7.6000e-004        | 0.0110        | 77.3907         |
| Worker       | 0.0584        | 0.0361        | 0.5854        | 1.5700e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 158.9985        | 158.9985        | 3.6800e-003        | 3.7500e-003   | 160.2089        |
| <b>Total</b> | <b>0.0629</b> | <b>0.1668</b> | <b>0.6392</b> | <b>2.2700e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>233.1069</b> | <b>233.1069</b> | <b>4.4400e-003</b> | <b>0.0147</b> | <b>237.5996</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        | 0.0000        | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> | <b>0.0000</b> | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.5100e-003   | 0.1307        | 0.0538        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.1084         | 74.1084         | 7.6000e-004        | 0.0110        | 77.3907         |
| Worker       | 0.0584        | 0.0361        | 0.5854        | 1.5700e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 158.9985        | 158.9985        | 3.6800e-003        | 3.7500e-003   | 160.2089        |
| <b>Total</b> | <b>0.0629</b> | <b>0.1668</b> | <b>0.6392</b> | <b>2.2700e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>233.1069</b> | <b>233.1069</b> | <b>4.4400e-003</b> | <b>0.0147</b> | <b>237.5996</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

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

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|-------------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |             |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.1125 | 1.0000e-005 | 6.1000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.3100e-003 | 1.3100e-003 | 0.0000 |     | 1.4000e-003 |
| Unmitigated | 0.1125 | 1.0000e-005 | 6.1000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.3100e-003 | 1.3100e-003 | 0.0000 |     | 1.4000e-003 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

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

## 6.2 Area by SubCategory

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 | 0.0199        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0926        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |     | 1.4000e-003        |
| <b>Total</b>          | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> |     | <b>1.4000e-003</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0199        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0926        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |     | 1.4000e-003        |
| <b>Total</b>          | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> |     | <b>1.4000e-003</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## RCCD Solar Plan Project - Norco College

## Riverside-South Coast County, Winter

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 6.00 | Acre   | 6.00        | 261,360.00         | 0          |

**1.2 Other Project Characteristics**

|                         |                            |                         |       |                           |       |
|-------------------------|----------------------------|-------------------------|-------|---------------------------|-------|
| Urbanization            | Urban                      | Wind Speed (m/s)        | 2.4   | Precipitation Freq (Days) | 28    |
| Climate Zone            | 10                         |                         |       | Operational Year          | 2023  |
| Utility Company         | Southern California Edison |                         |       |                           |       |
| CO2 Intensity (lb/MWhr) | 390.98                     | CH4 Intensity (lb/MWhr) | 0.033 | N2O Intensity (lb/MWhr)   | 0.004 |

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

Project Characteristics - Norco College solar construction

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value  |
|----------------------|----------------|---------------|------------|
| tblConstructionPhase | NumDays        | 230.00        | 41.00      |
| tblConstructionPhase | NumDays        | 20.00         | 10.00      |
| tblConstructionPhase | NumDays        | 10.00         | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 32.00      |
| tblConstructionPhase | PhaseEndDate   | 9/29/2023     | 2/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 10/14/2022    | 10/28/2022 |
| tblConstructionPhase | PhaseEndDate   | 8/16/2024     | 3/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 7/4/2025      | 4/26/2023  |
| tblConstructionPhase | PhaseStartDate | 11/12/2022    | 12/17/2022 |
| tblConstructionPhase | PhaseStartDate | 10/15/2022    | 10/29/2022 |
| tblConstructionPhase | PhaseStartDate | 9/30/2023     | 2/14/2023  |
| tblConstructionPhase | PhaseStartDate | 8/17/2024     | 3/14/2023  |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00     |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00      |
| tblOffRoadEquipment  | LoadFactor     | 0.41          | 0.41       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |
| tblOffRoadEquipment  | LoadFactor     | 0.43          | 0.43       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.50 | 0.50                    |
| tblOffRoadEquipment | LoadFactor                 | 0.44 | 0.44                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

|                     |                            |        |       |
|---------------------|----------------------------|--------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.5016 | 16.1196 | 12.8754 | 0.0232 | 7.3574        | 0.6802       | 8.0376     | 3.4988         | 0.6259        | 4.1247      | 0.0000   | 2,282.435<br>6 | 2,282.435<br>6 | 0.5783 | 0.0782 | 2,312.383<br>6 |
| 2023    | 0.5947 | 6.2057  | 7.1891  | 0.0223 | 0.5817        | 0.1936       | 0.7497     | 0.1584         | 0.1783        | 0.3293      | 0.0000   | 2,211.854<br>9 | 2,211.854<br>9 | 0.4790 | 0.0856 | 2,246.052<br>4 |
| Maximum | 1.5016 | 16.1196 | 12.8754 | 0.0232 | 7.3574        | 0.6802       | 8.0376     | 3.4988         | 0.6259        | 4.1247      | 0.0000   | 2,282.435<br>6 | 2,282.435<br>6 | 0.5783 | 0.0856 | 2,312.383<br>6 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.5016 | 16.1196 | 12.8754 | 0.0232 | 3.4620        | 0.6802       | 4.1421     | 1.6152         | 0.6259        | 2.2411      | 0.0000   | 2,282.435<br>6 | 2,282.435<br>6 | 0.5783 | 0.0782 | 2,312.383<br>6 |
| 2023    | 0.5947 | 6.2057  | 7.1891  | 0.0223 | 0.5817        | 0.1936       | 0.7497     | 0.1584         | 0.1783        | 0.3293      | 0.0000   | 2,211.854<br>9 | 2,211.854<br>9 | 0.4790 | 0.0856 | 2,246.052<br>4 |
| Maximum | 1.5016 | 16.1196 | 12.8754 | 0.0232 | 3.4620        | 0.6802       | 4.1421     | 1.6152         | 0.6259        | 2.2411      | 0.0000   | 2,282.435<br>6 | 2,282.435<br>6 | 0.5783 | 0.0856 | 2,312.383<br>6 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 49.07         | 0.00         | 44.33      | 51.51          | 0.00          | 42.29       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1125        | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |               | 1.4000e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.4000e-003</b> |

Mitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1125        | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |               | 1.4000e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.4000e-003</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

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

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name               | Phase Type            | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|--------------------------|-----------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation         | Site Preparation      | 10/1/2022  | 10/28/2022 | 5             | 20       |                   |
| 2            | Grading                  | Grading               | 10/29/2022 | 11/11/2022 | 5             | 10       |                   |
| 3            | Boring/Conduit           | Trenching             | 11/12/2022 | 12/16/2022 | 5             | 25       |                   |
| 4            | Racking/Other Mechanical | Building Construction | 12/17/2022 | 2/13/2023  | 5             | 41       |                   |
| 5            | PV Panel Installation    | Building Construction | 2/14/2023  | 3/13/2023  | 5             | 20       |                   |
| 6            | Other Electrical         | Building Construction | 3/14/2023  | 4/26/2023  | 5             | 32       |                   |

**Acres of Grading (Site Preparation Phase): 20****Acres of Grading (Grading Phase): 5****Acres of Paving: 6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| Other Electrical         | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts              | 0      | 8.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                 | 0      | 7.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts              | 0      | 8.00        | 89          | 0.20        |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| Racking/Other Mechanical | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Grading                  | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Grading                  | Excavators                | 0 | 8.00 | 158 | 0.38 |
| Other Electrical         | Forklifts                 | 0 | 8.00 | 89  | 0.20 |
| PV Panel Installation    | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Other Electrical         | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Grading                  | Rubber Tired Dozers       | 0 | 8.00 | 247 | 0.40 |
| Site Preparation         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Other Electrical         | Tractors/Loaders/Backhoes | 0 | 7.00 | 97  | 0.37 |
| Grading                  | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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 |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4155        | 15.7102        | 7.5362        | 0.0182        |               | 0.6742        | 0.6742        |                | 0.6202        | 0.6202        |          | 1,767.5199        | 1,767.5199        | 0.5717        |     | 1,781.8112        |
| <b>Total</b>  | <b>1.4155</b> | <b>15.7102</b> | <b>7.5362</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.6742</b> | <b>7.7568</b> | <b>3.4247</b>  | <b>0.6202</b> | <b>4.0450</b> |          | <b>1,767.5199</b> | <b>1,767.5199</b> | <b>0.5717</b> |     | <b>1,781.8112</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.0736        | 0.0530        | 0.6453        | 1.8400e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 186.0315        | 186.0315        | 5.0800e-003        | 5.2000e-003   | 187.7096        |
| <b>Total</b> | <b>0.0861</b> | <b>0.4094</b> | <b>0.7674</b> | <b>3.3000e-003</b> | <b>0.2748</b> | <b>6.0000e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.7000e-003</b> | <b>0.0797</b> |          | <b>340.5561</b> | <b>340.5561</b> | <b>6.6900e-003</b> | <b>0.0281</b> | <b>349.1086</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4155        | 15.7102        | 7.5362        | 0.0182        |               | 0.6742        | 0.6742        |                | 0.6202        | 0.6202        | 0.0000        | 1,767.5199        | 1,767.5199        | 0.5717        |     | 1,781.8112        |
| <b>Total</b>  | <b>1.4155</b> | <b>15.7102</b> | <b>7.5362</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.6742</b> | <b>3.8613</b> | <b>1.5411</b>  | <b>0.6202</b> | <b>2.1614</b> | <b>0.0000</b> | <b>1,767.5199</b> | <b>1,767.5199</b> | <b>0.5717</b> |     | <b>1,781.8112</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.0736        | 0.0530        | 0.6453        | 1.8400e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 186.0315        | 186.0315        | 5.0800e-003        | 5.2000e-003   | 187.7096        |
| <b>Total</b> | <b>0.0861</b> | <b>0.4094</b> | <b>0.7674</b> | <b>3.3000e-003</b> | <b>0.2748</b> | <b>6.0000e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.7000e-003</b> | <b>0.0797</b> |          | <b>340.5561</b> | <b>340.5561</b> | <b>6.6900e-003</b> | <b>0.0281</b> | <b>349.1086</b> |

## 3.3 Grading - 2022

Unmitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.5303        | 0.0000        | 0.5303        | 0.0573         | 0.0000        | 0.0573        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.7439        | 8.6373        | 5.7965        | 0.0123        |               | 0.3555        | 0.3555        |                | 0.3271        | 0.3271        |          | 1,193.4120        | 1,193.4120        | 0.3860        |     | 1,203.0613        |
| <b>Total</b>  | <b>0.7439</b> | <b>8.6373</b> | <b>5.7965</b> | <b>0.0123</b> | <b>0.5303</b> | <b>0.3555</b> | <b>0.8858</b> | <b>0.0573</b>  | <b>0.3271</b> | <b>0.3843</b> |          | <b>1,193.4120</b> | <b>1,193.4120</b> | <b>0.3860</b> |     | <b>1,203.0613</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.3 Grading - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 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       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.1031        | 0.0742        | 0.9034        | 2.5800e-003        | 0.3130        | 1.5600e-003        | 0.3145        | 0.0830         | 1.4300e-003        | 0.0844        |          | 260.4441        | 260.4441        | 7.1200e-003        | 7.2900e-003   | 262.7934        |
| <b>Total</b> | <b>0.1155</b> | <b>0.4306</b> | <b>1.0255</b> | <b>4.0400e-003</b> | <b>0.3642</b> | <b>6.4500e-003</b> | <b>0.3707</b> | <b>0.0978</b>  | <b>6.1100e-003</b> | <b>0.1039</b> |          | <b>414.9687</b> | <b>414.9687</b> | <b>8.7300e-003</b> | <b>0.0302</b> | <b>424.1924</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.2386        | 0.0000        | 0.2386        | 0.0258         | 0.0000        | 0.0258        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.7439        | 8.6373        | 5.7965        | 0.0123        |               | 0.3555        | 0.3555        |                | 0.3271        | 0.3271        | 0.0000        | 1,193.4120        | 1,193.4120        | 0.3860        |     | 1,203.0613        |
| <b>Total</b>  | <b>0.7439</b> | <b>8.6373</b> | <b>5.7965</b> | <b>0.0123</b> | <b>0.2386</b> | <b>0.3555</b> | <b>0.5941</b> | <b>0.0258</b>  | <b>0.3271</b> | <b>0.3529</b> | <b>0.0000</b> | <b>1,193.4120</b> | <b>1,193.4120</b> | <b>0.3860</b> |     | <b>1,203.0613</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.3 Grading - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 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       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.1031        | 0.0742        | 0.9034        | 2.5800e-003        | 0.3130        | 1.5600e-003        | 0.3145        | 0.0830         | 1.4300e-003        | 0.0844        |          | 260.4441        | 260.4441        | 7.1200e-003        | 7.2900e-003   | 262.7934        |
| <b>Total</b> | <b>0.1155</b> | <b>0.4306</b> | <b>1.0255</b> | <b>4.0400e-003</b> | <b>0.3642</b> | <b>6.4500e-003</b> | <b>0.3707</b> | <b>0.0978</b>  | <b>6.1100e-003</b> | <b>0.1039</b> |          | <b>414.9687</b> | <b>414.9687</b> | <b>8.7300e-003</b> | <b>0.0302</b> | <b>424.1924</b> |

## 3.4 Boring/Conduit - 2022

Unmitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.9950        | 10.0421        | 11.7277        | 0.0177        |               | 0.5192        | 0.5192        |                | 0.4777        | 0.4777        |          | 1,712.9423        | 1,712.9423        | 0.5540        |     | 1,726.7923        |
| <b>Total</b> | <b>0.9950</b> | <b>10.0421</b> | <b>11.7277</b> | <b>0.0177</b> |               | <b>0.5192</b> | <b>0.5192</b> |                | <b>0.4777</b> | <b>0.4777</b> |          | <b>1,712.9423</b> | <b>1,712.9423</b> | <b>0.5540</b> |     | <b>1,726.7923</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.4 Boring/Conduit - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0249        | 0.7128        | 0.2443        | 2.9200e-003        | 0.1025        | 9.7800e-003   | 0.1123        | 0.0295         | 9.3600e-003   | 0.0389        |          | 309.0492        | 309.0492        | 3.2200e-003   | 0.0459        | 322.7979        |
| Worker       | 0.1031        | 0.0742        | 0.9034        | 2.5800e-003        | 0.3130        | 1.5600e-003   | 0.3145        | 0.0830         | 1.4300e-003   | 0.0844        |          | 260.4441        | 260.4441        | 7.1200e-003   | 7.2900e-003   | 262.7934        |
| <b>Total</b> | <b>0.1280</b> | <b>0.7870</b> | <b>1.1477</b> | <b>5.5000e-003</b> | <b>0.4155</b> | <b>0.0113</b> | <b>0.4268</b> | <b>0.1125</b>  | <b>0.0108</b> | <b>0.1233</b> |          | <b>569.4933</b> | <b>569.4933</b> | <b>0.0103</b> | <b>0.0532</b> | <b>585.5913</b> |

Mitigated Construction On-Site

|              | ROG           | NOx            | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |                |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.9950        | 10.0421        | 11.7277        | 0.0177        |               | 0.5192        | 0.5192        |                | 0.4777        | 0.4777        | 0.0000        | 1,712.9423        | 1,712.9423        | 0.5540        |     | 1,726.7923        |
| <b>Total</b> | <b>0.9950</b> | <b>10.0421</b> | <b>11.7277</b> | <b>0.0177</b> |               | <b>0.5192</b> | <b>0.5192</b> |                | <b>0.4777</b> | <b>0.4777</b> | <b>0.0000</b> | <b>1,712.9423</b> | <b>1,712.9423</b> | <b>0.5540</b> |     | <b>1,726.7923</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.4 Boring/Conduit - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0249        | 0.7128        | 0.2443        | 2.9200e-003        | 0.1025        | 9.7800e-003   | 0.1123        | 0.0295         | 9.3600e-003   | 0.0389        |          | 309.0492        | 309.0492        | 3.2200e-003   | 0.0459        | 322.7979        |
| Worker       | 0.1031        | 0.0742        | 0.9034        | 2.5800e-003        | 0.3130        | 1.5600e-003   | 0.3145        | 0.0830         | 1.4300e-003   | 0.0844        |          | 260.4441        | 260.4441        | 7.1200e-003   | 7.2900e-003   | 262.7934        |
| <b>Total</b> | <b>0.1280</b> | <b>0.7870</b> | <b>1.1477</b> | <b>5.5000e-003</b> | <b>0.4155</b> | <b>0.0113</b> | <b>0.4268</b> | <b>0.1125</b>  | <b>0.0108</b> | <b>0.1233</b> |          | <b>569.4933</b> | <b>569.4933</b> | <b>0.0103</b> | <b>0.0532</b> | <b>585.5913</b> |

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4740        | 5.0973        | 5.8045        | 0.0149        |               | 0.2109        | 0.2109        |                | 0.1941        | 0.1941        |          | 1,439.7134        | 1,439.7134        | 0.4656        |     | 1,451.3542        |
| <b>Total</b> | <b>0.4740</b> | <b>5.0973</b> | <b>5.8045</b> | <b>0.0149</b> |               | <b>0.2109</b> | <b>0.2109</b> |                | <b>0.1941</b> | <b>0.1941</b> |          | <b>1,439.7134</b> | <b>1,439.7134</b> | <b>0.4656</b> |     | <b>1,451.3542</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0374        | 1.0692        | 0.3664        | 4.3700e-003        | 0.1537        | 0.0147        | 0.1684        | 0.0443         | 0.0140        | 0.0583        |          | 463.5738        | 463.5738        | 4.8300e-003   | 0.0688        | 484.1969        |
| Worker       | 0.1325        | 0.0954        | 1.1615        | 3.3100e-003        | 0.4024        | 2.0000e-003   | 0.4044        | 0.1067         | 1.8400e-003   | 0.1086        |          | 334.8567        | 334.8567        | 9.1500e-003   | 9.3700e-003   | 337.8773        |
| <b>Total</b> | <b>0.1699</b> | <b>1.1646</b> | <b>1.5279</b> | <b>7.6800e-003</b> | <b>0.5561</b> | <b>0.0167</b> | <b>0.5728</b> | <b>0.1510</b>  | <b>0.0159</b> | <b>0.1669</b> |          | <b>798.4305</b> | <b>798.4305</b> | <b>0.0140</b> | <b>0.0782</b> | <b>822.0741</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4740        | 5.0973        | 5.8045        | 0.0149        |               | 0.2109        | 0.2109        |                | 0.1941        | 0.1941        | 0.0000        | 1,439.7134        | 1,439.7134        | 0.4656        |     | 1,451.3542        |
| <b>Total</b> | <b>0.4740</b> | <b>5.0973</b> | <b>5.8045</b> | <b>0.0149</b> |               | <b>0.2109</b> | <b>0.2109</b> |                | <b>0.1941</b> | <b>0.1941</b> | <b>0.0000</b> | <b>1,439.7134</b> | <b>1,439.7134</b> | <b>0.4656</b> |     | <b>1,451.3542</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0374        | 1.0692        | 0.3664        | 4.3700e-003        | 0.1537        | 0.0147        | 0.1684        | 0.0443         | 0.0140        | 0.0583        |          | 463.5738        | 463.5738        | 4.8300e-003   | 0.0688        | 484.1969        |
| Worker       | 0.1325        | 0.0954        | 1.1615        | 3.3100e-003        | 0.4024        | 2.0000e-003   | 0.4044        | 0.1067         | 1.8400e-003   | 0.1086        |          | 334.8567        | 334.8567        | 9.1500e-003   | 9.3700e-003   | 337.8773        |
| <b>Total</b> | <b>0.1699</b> | <b>1.1646</b> | <b>1.5279</b> | <b>7.6800e-003</b> | <b>0.5561</b> | <b>0.0167</b> | <b>0.5728</b> | <b>0.1510</b>  | <b>0.0159</b> | <b>0.1669</b> |          | <b>798.4305</b> | <b>798.4305</b> | <b>0.0140</b> | <b>0.0782</b> | <b>822.0741</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4464        | 4.6687        | 5.7859        | 0.0149        |               | 0.1848        | 0.1848        |                | 0.1701        | 0.1701        |          | 1,441.9485        | 1,441.9485        | 0.4664        |     | 1,453.6074        |
| <b>Total</b> | <b>0.4464</b> | <b>4.6687</b> | <b>5.7859</b> | <b>0.0149</b> |               | <b>0.1848</b> | <b>0.1848</b> |                | <b>0.1701</b> | <b>0.1701</b> |          | <b>1,441.9485</b> | <b>1,441.9485</b> | <b>0.4664</b> |     | <b>1,453.6074</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0251        | 0.8316        | 0.3337        | 4.2000e-003        | 0.1537        | 6.8500e-003        | 0.1606        | 0.0443         | 6.5600e-003        | 0.0508        |          | 445.7539        | 445.7539        | 4.4400e-003   | 0.0659        | 465.5106        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1483</b> | <b>0.9158</b> | <b>1.4033</b> | <b>7.4100e-003</b> | <b>0.5561</b> | <b>8.7300e-003</b> | <b>0.5649</b> | <b>0.1510</b>  | <b>8.2900e-003</b> | <b>0.1593</b> |          | <b>769.9064</b> | <b>769.9064</b> | <b>0.0127</b> | <b>0.0746</b> | <b>792.4450</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4464        | 4.6687        | 5.7859        | 0.0149        |               | 0.1848        | 0.1848        |                | 0.1701        | 0.1701        | 0.0000        | 1,441.9485        | 1,441.9485        | 0.4664        |     | 1,453.6074        |
| <b>Total</b> | <b>0.4464</b> | <b>4.6687</b> | <b>5.7859</b> | <b>0.0149</b> |               | <b>0.1848</b> | <b>0.1848</b> |                | <b>0.1701</b> | <b>0.1701</b> | <b>0.0000</b> | <b>1,441.9485</b> | <b>1,441.9485</b> | <b>0.4664</b> |     | <b>1,453.6074</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0251        | 0.8316        | 0.3337        | 4.2000e-003        | 0.1537        | 6.8500e-003        | 0.1606        | 0.0443         | 6.5600e-003        | 0.0508        |          | 445.7539        | 445.7539        | 4.4400e-003   | 0.0659        | 465.5106        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1483</b> | <b>0.9158</b> | <b>1.4033</b> | <b>7.4100e-003</b> | <b>0.5561</b> | <b>8.7300e-003</b> | <b>0.5649</b> | <b>0.1510</b>  | <b>8.2900e-003</b> | <b>0.1593</b> |          | <b>769.9064</b> | <b>769.9064</b> | <b>0.0127</b> | <b>0.0746</b> | <b>792.4450</b> |

## 3.6 PV Panel Installation - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        |          | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> |          | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.6 PV Panel Installation - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0292        | 0.9701        | 0.3893        | 4.9000e-003        | 0.1793        | 8.0000e-003        | 0.1873        | 0.0516         | 7.6500e-003        | 0.0593        |          | 520.0462        | 520.0462        | 5.1900e-003   | 0.0769        | 543.0957        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1524</b> | <b>1.0544</b> | <b>1.4589</b> | <b>8.1100e-003</b> | <b>0.5817</b> | <b>9.8800e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3800e-003</b> | <b>0.1677</b> |          | <b>844.1987</b> | <b>844.1987</b> | <b>0.0134</b> | <b>0.0856</b> | <b>870.0301</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        | 0.0000        | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> | <b>0.0000</b> | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0292        | 0.9701        | 0.3893        | 4.9000e-003        | 0.1793        | 8.0000e-003        | 0.1873        | 0.0516         | 7.6500e-003        | 0.0593        |          | 520.0462        | 520.0462        | 5.1900e-003   | 0.0769        | 543.0957        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1524</b> | <b>1.0544</b> | <b>1.4589</b> | <b>8.1100e-003</b> | <b>0.5817</b> | <b>9.8800e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3800e-003</b> | <b>0.1677</b> |          | <b>844.1987</b> | <b>844.1987</b> | <b>0.0134</b> | <b>0.0856</b> | <b>870.0301</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        |          | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> |          | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 3.7 Other Electrical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.1800e-003   | 0.1386        | 0.0556        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.2923         | 74.2923         | 7.4000e-004        | 0.0110        | 77.5851         |
| Worker       | 0.0548        | 0.0375        | 0.4754        | 1.4300e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 144.0678        | 144.0678        | 3.6600e-003        | 3.8400e-003   | 145.3041        |
| <b>Total</b> | <b>0.0589</b> | <b>0.1760</b> | <b>0.5310</b> | <b>2.1300e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>218.3601</b> | <b>218.3601</b> | <b>4.4000e-003</b> | <b>0.0148</b> | <b>222.8893</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        | 0.0000        | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> | <b>0.0000</b> | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.1800e-003   | 0.1386        | 0.0556        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.2923         | 74.2923         | 7.4000e-004        | 0.0110        | 77.5851         |
| Worker       | 0.0548        | 0.0375        | 0.4754        | 1.4300e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 144.0678        | 144.0678        | 3.6600e-003        | 3.8400e-003   | 145.3041        |
| <b>Total</b> | <b>0.0589</b> | <b>0.1760</b> | <b>0.5310</b> | <b>2.1300e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>218.3601</b> | <b>218.3601</b> | <b>4.4000e-003</b> | <b>0.0148</b> | <b>222.8893</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

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

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|-------------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |             |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.1125 | 1.0000e-005 | 6.1000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.3100e-003 | 1.3100e-003 | 0.0000 |     | 1.4000e-003 |
| Unmitigated | 0.1125 | 1.0000e-005 | 6.1000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.3100e-003 | 1.3100e-003 | 0.0000 |     | 1.4000e-003 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 6.2 Area by SubCategory

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 | 0.0199        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0926        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |     | 1.4000e-003        |
| <b>Total</b>          | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> |     | <b>1.4000e-003</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

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

## 6.2 Area by SubCategory

Mitigated

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0199        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0926        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 6.0000e-005   | 1.0000e-005        | 6.1000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.3100e-003        | 1.3100e-003        | 0.0000        |     | 1.4000e-003        |
| <b>Total</b>          | <b>0.1125</b> | <b>1.0000e-005</b> | <b>6.1000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.3100e-003</b> | <b>1.3100e-003</b> | <b>0.0000</b> |     | <b>1.4000e-003</b> |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

## RCCD Solar Plan Project - Norco College

## Riverside-South Coast County, Annual

**1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 6.00 | Acre   | 6.00        | 261,360.00         | 0          |

**1.2 Other Project Characteristics**

|                         |                            |                         |       |                           |       |
|-------------------------|----------------------------|-------------------------|-------|---------------------------|-------|
| Urbanization            | Urban                      | Wind Speed (m/s)        | 2.4   | Precipitation Freq (Days) | 28    |
| Climate Zone            | 10                         |                         |       | Operational Year          | 2023  |
| Utility Company         | Southern California Edison |                         |       |                           |       |
| CO2 Intensity (lb/MWhr) | 390.98                     | CH4 Intensity (lb/MWhr) | 0.033 | N2O Intensity (lb/MWhr)   | 0.004 |

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

Project Characteristics - Norco College solar construction

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value  |
|----------------------|----------------|---------------|------------|
| tblConstructionPhase | NumDays        | 230.00        | 41.00      |
| tblConstructionPhase | NumDays        | 20.00         | 10.00      |
| tblConstructionPhase | NumDays        | 10.00         | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 20.00      |
| tblConstructionPhase | NumDays        | 230.00        | 32.00      |
| tblConstructionPhase | PhaseEndDate   | 9/29/2023     | 2/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 10/14/2022    | 10/28/2022 |
| tblConstructionPhase | PhaseEndDate   | 8/16/2024     | 3/13/2023  |
| tblConstructionPhase | PhaseEndDate   | 7/4/2025      | 4/26/2023  |
| tblConstructionPhase | PhaseStartDate | 11/12/2022    | 12/17/2022 |
| tblConstructionPhase | PhaseStartDate | 10/15/2022    | 10/29/2022 |
| tblConstructionPhase | PhaseStartDate | 9/30/2023     | 2/14/2023  |
| tblConstructionPhase | PhaseStartDate | 8/17/2024     | 3/14/2023  |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00     |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00      |
| tblOffRoadEquipment  | LoadFactor     | 0.41          | 0.41       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |
| tblOffRoadEquipment  | LoadFactor     | 0.43          | 0.43       |
| tblOffRoadEquipment  | LoadFactor     | 0.38          | 0.38       |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.50 | 0.50                    |
| tblOffRoadEquipment | LoadFactor                 | 0.44 | 0.44                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

|                     |                            |        |       |
|---------------------|----------------------------|--------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 4.00   | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00   | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00   | 1.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00   | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 43.00  | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00   | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 110.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction****Unmitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O         | CO2e    |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-------------|---------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |             |         |
| 2022    | 0.0364  | 0.3732 | 0.3161 | 7.0000e-004 | 0.0858        | 0.0164       | 0.1022     | 0.0379         | 0.0151        | 0.0530      | 0.0000   | 62.6207   | 62.6207   | 0.0156 | 1.3500e-003 | 63.4141 |
| 2023    | 0.0203  | 0.2103 | 0.2257 | 6.6000e-004 | 0.0174        | 6.6000e-003  | 0.0240     | 4.7300e-003    | 6.0800e-003   | 0.0108      | 0.0000   | 59.6962   | 59.6962   | 0.0126 | 2.0400e-003 | 60.6198 |
| Maximum | 0.0364  | 0.3732 | 0.3161 | 7.0000e-004 | 0.0858        | 0.0164       | 0.1022     | 0.0379         | 0.0151        | 0.0530      | 0.0000   | 62.6207   | 62.6207   | 0.0156 | 2.0400e-003 | 63.4141 |

**Mitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O         | CO2e    |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|-------------|---------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |        |             |         |
| 2022    | 0.0364  | 0.3732 | 0.3161 | 7.0000e-004 | 0.0454        | 0.0164       | 0.0618     | 0.0189         | 0.0151        | 0.0340      | 0.0000   | 62.6206   | 62.6206   | 0.0156 | 1.3500e-003 | 63.4141 |
| 2023    | 0.0203  | 0.2103 | 0.2257 | 6.6000e-004 | 0.0174        | 6.6000e-003  | 0.0240     | 4.7300e-003    | 6.0800e-003   | 0.0108      | 0.0000   | 59.6962   | 59.6962   | 0.0126 | 2.0400e-003 | 60.6198 |
| Maximum | 0.0364  | 0.3732 | 0.3161 | 7.0000e-004 | 0.0454        | 0.0164       | 0.0618     | 0.0189         | 0.0151        | 0.0340      | 0.0000   | 62.6206   | 62.6206   | 0.0156 | 2.0400e-003 | 63.4141 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 39.14         | 0.00         | 32.01      | 44.58          | 0.00          | 29.79       | 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       | 10-1-2022  | 12-31-2022 | 0.4122                                       | 0.4122                                     |
| 2       | 1-1-2023   | 3-31-2023  | 0.1677                                       | 0.1677                                     |
| 3       | 4-1-2023   | 6-30-2023  | 0.0626                                       | 0.0626                                     |
|         |            | Highest    | 0.4122                                       | 0.4122                                     |

## 2.2 Overall Operational

Unmitigated Operational

|          | ROG     | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|----------|---------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category | tons/yr |        |             |        |               |              |            |                |               |             | MT/yr    |             |             |        |        |             |
| Area     | 0.0205  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Energy   | 0.0000  | 0.0000 | 0.0000      | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Mobile   | 0.0000  | 0.0000 | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Waste    |         |        |             |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Water    |         |        |             |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Total    | 0.0205  | 0.0000 | 8.0000e-005 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

## 2.2 Overall Operational

Mitigated Operational

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Area         | 0.0205        | 0.0000        | 8.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.5000e-004        | 1.5000e-004        | 0.0000        | 0.0000        | 1.6000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Waste        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Water        |               |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0205</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> |

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

## 3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name       | Phase Type       | Start Date | End Date   | Num Days Week | Num Days | Phase Description |
|--------------|------------------|------------------|------------|------------|---------------|----------|-------------------|
| 1            | Site Preparation | Site Preparation | 10/1/2022  | 10/28/2022 | 5             | 20       |                   |
| 2            | Grading          | Grading          | 10/29/2022 | 11/11/2022 | 5             | 10       |                   |
| 3            | Boring/Conduit   | Trenching        | 11/12/2022 | 12/16/2022 | 5             | 25       |                   |

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

|   |                          |                       |            |           |   |    |
|---|--------------------------|-----------------------|------------|-----------|---|----|
| 4 | Racking/Other Mechanical | Building Construction | 12/17/2022 | 2/13/2023 | 5 | 41 |
| 5 | PV Panel Installation    | Building Construction | 2/14/2023  | 3/13/2023 | 5 | 20 |
| 6 | Other Electrical         | Building Construction | 3/14/2023  | 4/26/2023 | 5 | 32 |

**Acres of Grading (Site Preparation Phase): 20****Acres of Grading (Grading Phase): 5****Acres of Paving: 6****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|---------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| Other Electrical         | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts                 | 0      | 8.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                    | 0      | 7.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts                 | 0      | 8.00        | 89          | 0.20        |
| Racking/Other Mechanical | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Grading                  | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Grading                  | Excavators                | 0      | 8.00        | 158         | 0.38        |
| Other Electrical         | Forklifts                 | 0      | 8.00        | 89          | 0.20        |
| PV Panel Installation    | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Other Electrical         | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Grading                  | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation         | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Other Electrical         | Tractors/Loaders/Backhoes | 0      | 7.00        | 97          | 0.37        |
| Grading                  | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

**Trips and VMT**

| Phase Name               | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

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

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0708        | 0.0000             | 0.0708        | 0.0343         | 0.0000             | 0.0343        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0142        | 0.1571        | 0.0754        | 1.8000e-004        |               | 6.7400e-003        | 6.7400e-003   |                | 6.2000e-003        | 6.2000e-003   | 0.0000        | 16.0347        | 16.0347        | 5.1900e-003        | 0.0000        | 16.1643        |
| <b>Total</b>  | <b>0.0142</b> | <b>0.1571</b> | <b>0.0754</b> | <b>1.8000e-004</b> | <b>0.0708</b> | <b>6.7400e-003</b> | <b>0.0776</b> | <b>0.0343</b>  | <b>6.2000e-003</b> | <b>0.0405</b> | <b>0.0000</b> | <b>16.0347</b> | <b>16.0347</b> | <b>5.1900e-003</b> | <b>0.0000</b> | <b>16.1643</b> |

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.3000e-004        | 3.5500e-003        | 1.2000e-003        | 1.0000e-005        | 5.1000e-004        | 5.0000e-005        | 5.5000e-004        | 1.5000e-004        | 5.0000e-005        | 1.9000e-004        | 0.0000        | 1.4009        | 1.4009        | 1.0000e-005        | 2.1000e-004        | 1.4633        |
| Worker       | 7.0000e-004        | 5.4000e-004        | 6.8000e-003        | 2.0000e-005        | 2.2000e-003        | 1.0000e-005        | 2.2100e-003        | 5.8000e-004        | 1.0000e-005        | 5.9000e-004        | 0.0000        | 1.7271        | 1.7271        | 5.0000e-005        | 5.0000e-005        | 1.7426        |
| <b>Total</b> | <b>8.3000e-004</b> | <b>4.0900e-003</b> | <b>8.0000e-003</b> | <b>3.0000e-005</b> | <b>2.7100e-003</b> | <b>6.0000e-005</b> | <b>2.7600e-003</b> | <b>7.3000e-004</b> | <b>6.0000e-005</b> | <b>7.8000e-004</b> | <b>0.0000</b> | <b>3.1280</b> | <b>3.1280</b> | <b>6.0000e-005</b> | <b>2.6000e-004</b> | <b>3.2058</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0319        | 0.0000             | 0.0319        | 0.0154         | 0.0000             | 0.0154        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0142        | 0.1571        | 0.0754        | 1.8000e-004        |               | 6.7400e-003        | 6.7400e-003   |                | 6.2000e-003        | 6.2000e-003   | 0.0000        | 16.0347        | 16.0347        | 5.1900e-003        | 0.0000        | 16.1643        |
| <b>Total</b>  | <b>0.0142</b> | <b>0.1571</b> | <b>0.0754</b> | <b>1.8000e-004</b> | <b>0.0319</b> | <b>6.7400e-003</b> | <b>0.0386</b> | <b>0.0154</b>  | <b>6.2000e-003</b> | <b>0.0216</b> | <b>0.0000</b> | <b>16.0347</b> | <b>16.0347</b> | <b>5.1900e-003</b> | <b>0.0000</b> | <b>16.1643</b> |

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.3000e-004        | 3.5500e-003        | 1.2000e-003        | 1.0000e-005        | 5.1000e-004        | 5.0000e-005        | 5.5000e-004        | 1.5000e-004        | 5.0000e-005        | 1.9000e-004        | 0.0000        | 1.4009        | 1.4009        | 1.0000e-005        | 2.1000e-004        | 1.4633        |
| Worker       | 7.0000e-004        | 5.4000e-004        | 6.8000e-003        | 2.0000e-005        | 2.2000e-003        | 1.0000e-005        | 2.2100e-003        | 5.8000e-004        | 1.0000e-005        | 5.9000e-004        | 0.0000        | 1.7271        | 1.7271        | 5.0000e-005        | 5.0000e-005        | 1.7426        |
| <b>Total</b> | <b>8.3000e-004</b> | <b>4.0900e-003</b> | <b>8.0000e-003</b> | <b>3.0000e-005</b> | <b>2.7100e-003</b> | <b>6.0000e-005</b> | <b>2.7600e-003</b> | <b>7.3000e-004</b> | <b>6.0000e-005</b> | <b>7.8000e-004</b> | <b>0.0000</b> | <b>3.1280</b> | <b>3.1280</b> | <b>6.0000e-005</b> | <b>2.6000e-004</b> | <b>3.2058</b> |

## 3.3 Grading - 2022

Unmitigated Construction On-Site

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 2.6500e-003        | 0.0000             | 2.6500e-003        | 2.9000e-004        | 0.0000             | 2.9000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 3.7200e-003        | 0.0432        | 0.0290        | 6.0000e-005        |                    | 1.7800e-003        | 1.7800e-003        |                    | 1.6400e-003        | 1.6400e-003        | 0.0000        | 5.4132        | 5.4132        | 1.7500e-003        | 0.0000        | 5.4570        |
| <b>Total</b>  | <b>3.7200e-003</b> | <b>0.0432</b> | <b>0.0290</b> | <b>6.0000e-005</b> | <b>2.6500e-003</b> | <b>1.7800e-003</b> | <b>4.4300e-003</b> | <b>2.9000e-004</b> | <b>1.6400e-003</b> | <b>1.9300e-003</b> | <b>0.0000</b> | <b>5.4132</b> | <b>5.4132</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.4570</b> |

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

## 3.3 Grading - 2022

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 6.0000e-005        | 1.7800e-003        | 6.0000e-004        | 1.0000e-005        | 2.5000e-004        | 2.0000e-005        | 2.8000e-004        | 7.0000e-005        | 2.0000e-005        | 1.0000e-004        | 0.0000        | 0.7005        | 0.7005        | 1.0000e-005        | 1.0000e-004        | 0.7316        |
| Worker       | 4.9000e-004        | 3.8000e-004        | 4.7600e-003        | 1.0000e-005        | 1.5400e-003        | 1.0000e-005        | 1.5500e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.2089        | 1.2089        | 3.0000e-005        | 3.0000e-005        | 1.2198        |
| <b>Total</b> | <b>5.5000e-004</b> | <b>2.1600e-003</b> | <b>5.3600e-003</b> | <b>2.0000e-005</b> | <b>1.7900e-003</b> | <b>3.0000e-005</b> | <b>1.8300e-003</b> | <b>4.8000e-004</b> | <b>3.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.9094</b> | <b>1.9094</b> | <b>4.0000e-005</b> | <b>1.3000e-004</b> | <b>1.9514</b> |

Mitigated Construction On-Site

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 1.1900e-003        | 0.0000             | 1.1900e-003        | 1.3000e-004        | 0.0000             | 1.3000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 3.7200e-003        | 0.0432        | 0.0290        | 6.0000e-005        |                    | 1.7800e-003        | 1.7800e-003        |                    | 1.6400e-003        | 1.6400e-003        | 0.0000        | 5.4132        | 5.4132        | 1.7500e-003        | 0.0000        | 5.4570        |
| <b>Total</b>  | <b>3.7200e-003</b> | <b>0.0432</b> | <b>0.0290</b> | <b>6.0000e-005</b> | <b>1.1900e-003</b> | <b>1.7800e-003</b> | <b>2.9700e-003</b> | <b>1.3000e-004</b> | <b>1.6400e-003</b> | <b>1.7700e-003</b> | <b>0.0000</b> | <b>5.4132</b> | <b>5.4132</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.4570</b> |

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

## 3.3 Grading - 2022

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 6.0000e-005        | 1.7800e-003        | 6.0000e-004        | 1.0000e-005        | 2.5000e-004        | 2.0000e-005        | 2.8000e-004        | 7.0000e-005        | 2.0000e-005        | 1.0000e-004        | 0.0000        | 0.7005        | 0.7005        | 1.0000e-005        | 1.0000e-004        | 0.7316        |
| Worker       | 4.9000e-004        | 3.8000e-004        | 4.7600e-003        | 1.0000e-005        | 1.5400e-003        | 1.0000e-005        | 1.5500e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.2089        | 1.2089        | 3.0000e-005        | 3.0000e-005        | 1.2198        |
| <b>Total</b> | <b>5.5000e-004</b> | <b>2.1600e-003</b> | <b>5.3600e-003</b> | <b>2.0000e-005</b> | <b>1.7900e-003</b> | <b>3.0000e-005</b> | <b>1.8300e-003</b> | <b>4.8000e-004</b> | <b>3.0000e-005</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.9094</b> | <b>1.9094</b> | <b>4.0000e-005</b> | <b>1.3000e-004</b> | <b>1.9514</b> |

## 3.4 Boring/Conduit - 2022

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0124        | 0.1255        | 0.1466        | 2.2000e-004        |               | 6.4900e-003        | 6.4900e-003        |                | 5.9700e-003        | 5.9700e-003        | 0.0000        | 19.4244        | 19.4244        | 6.2800e-003        | 0.0000        | 19.5815        |
| <b>Total</b> | <b>0.0124</b> | <b>0.1255</b> | <b>0.1466</b> | <b>2.2000e-004</b> |               | <b>6.4900e-003</b> | <b>6.4900e-003</b> |                | <b>5.9700e-003</b> | <b>5.9700e-003</b> | <b>0.0000</b> | <b>19.4244</b> | <b>19.4244</b> | <b>6.2800e-003</b> | <b>0.0000</b> | <b>19.5815</b> |

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

## 3.4 Boring/Conduit - 2022

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 3.2000e-004        | 8.8800e-003        | 2.9900e-003   | 4.0000e-005        | 1.2600e-003        | 1.2000e-004        | 1.3900e-003        | 3.6000e-004        | 1.2000e-004        | 4.8000e-004        | 0.0000        | 3.5024        | 3.5024        | 4.0000e-005        | 5.2000e-004        | 3.6582        |
| Worker       | 1.2200e-003        | 9.5000e-004        | 0.0119        | 3.0000e-005        | 3.8500e-003        | 2.0000e-005        | 3.8700e-003        | 1.0200e-003        | 2.0000e-005        | 1.0400e-003        | 0.0000        | 3.0224        | 3.0224        | 8.0000e-005        | 8.0000e-005        | 3.0495        |
| <b>Total</b> | <b>1.5400e-003</b> | <b>9.8300e-003</b> | <b>0.0149</b> | <b>7.0000e-005</b> | <b>5.1100e-003</b> | <b>1.4000e-004</b> | <b>5.2600e-003</b> | <b>1.3800e-003</b> | <b>1.4000e-004</b> | <b>1.5200e-003</b> | <b>0.0000</b> | <b>6.5247</b> | <b>6.5247</b> | <b>1.2000e-004</b> | <b>6.0000e-004</b> | <b>6.7076</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr       |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 0.0124        | 0.1255        | 0.1466        | 2.2000e-004        |               | 6.4900e-003        | 6.4900e-003        |                | 5.9700e-003        | 5.9700e-003        | 0.0000        | 19.4244        | 19.4244        | 6.2800e-003        | 0.0000        | 19.5815        |
| <b>Total</b> | <b>0.0124</b> | <b>0.1255</b> | <b>0.1466</b> | <b>2.2000e-004</b> |               | <b>6.4900e-003</b> | <b>6.4900e-003</b> |                | <b>5.9700e-003</b> | <b>5.9700e-003</b> | <b>0.0000</b> | <b>19.4244</b> | <b>19.4244</b> | <b>6.2800e-003</b> | <b>0.0000</b> | <b>19.5815</b> |

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

## 3.4 Boring/Conduit - 2022

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 3.2000e-004        | 8.8800e-003        | 2.9900e-003   | 4.0000e-005        | 1.2600e-003        | 1.2000e-004        | 1.3900e-003        | 3.6000e-004        | 1.2000e-004        | 4.8000e-004        | 0.0000        | 3.5024        | 3.5024        | 4.0000e-005        | 5.2000e-004        | 3.6582        |
| Worker       | 1.2200e-003        | 9.5000e-004        | 0.0119        | 3.0000e-005        | 3.8500e-003        | 2.0000e-005        | 3.8700e-003        | 1.0200e-003        | 2.0000e-005        | 1.0400e-003        | 0.0000        | 3.0224        | 3.0224        | 8.0000e-005        | 8.0000e-005        | 3.0495        |
| <b>Total</b> | <b>1.5400e-003</b> | <b>9.8300e-003</b> | <b>0.0149</b> | <b>7.0000e-005</b> | <b>5.1100e-003</b> | <b>1.4000e-004</b> | <b>5.2600e-003</b> | <b>1.3800e-003</b> | <b>1.4000e-004</b> | <b>1.5200e-003</b> | <b>0.0000</b> | <b>6.5247</b> | <b>6.5247</b> | <b>1.2000e-004</b> | <b>6.0000e-004</b> | <b>6.7076</b> |

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 2.3700e-003        | 0.0255        | 0.0290        | 7.0000e-005        |               | 1.0500e-003        | 1.0500e-003        |                | 9.7000e-004        | 9.7000e-004        | 0.0000        | 6.5304        | 6.5304        | 2.1100e-003        | 0.0000        | 6.5832        |
| <b>Total</b> | <b>2.3700e-003</b> | <b>0.0255</b> | <b>0.0290</b> | <b>7.0000e-005</b> |               | <b>1.0500e-003</b> | <b>1.0500e-003</b> |                | <b>9.7000e-004</b> | <b>9.7000e-004</b> | <b>0.0000</b> | <b>6.5304</b> | <b>6.5304</b> | <b>2.1100e-003</b> | <b>0.0000</b> | <b>6.5832</b> |

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

## 3.5 Racking/Other Mechanical - 2022

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.9000e-004        | 5.3300e-003        | 1.7900e-003        | 2.0000e-005        | 7.6000e-004        | 7.0000e-005        | 8.3000e-004        | 2.2000e-004        | 7.0000e-005        | 2.9000e-004        | 0.0000        | 2.1014        | 2.1014        | 2.0000e-005        | 3.1000e-004        | 2.1949        |
| Worker       | 6.3000e-004        | 4.9000e-004        | 6.1200e-003        | 2.0000e-005        | 1.9800e-003        | 1.0000e-005        | 1.9900e-003        | 5.3000e-004        | 1.0000e-005        | 5.3000e-004        | 0.0000        | 1.5544        | 1.5544        | 4.0000e-005        | 4.0000e-005        | 1.5683        |
| <b>Total</b> | <b>8.2000e-004</b> | <b>5.8200e-003</b> | <b>7.9100e-003</b> | <b>4.0000e-005</b> | <b>2.7400e-003</b> | <b>8.0000e-005</b> | <b>2.8200e-003</b> | <b>7.5000e-004</b> | <b>8.0000e-005</b> | <b>8.2000e-004</b> | <b>0.0000</b> | <b>3.6558</b> | <b>3.6558</b> | <b>6.0000e-005</b> | <b>3.5000e-004</b> | <b>3.7632</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 2.3700e-003        | 0.0255        | 0.0290        | 7.0000e-005        |               | 1.0500e-003        | 1.0500e-003        |                | 9.7000e-004        | 9.7000e-004        | 0.0000        | 6.5304        | 6.5304        | 2.1100e-003        | 0.0000        | 6.5832        |
| <b>Total</b> | <b>2.3700e-003</b> | <b>0.0255</b> | <b>0.0290</b> | <b>7.0000e-005</b> |               | <b>1.0500e-003</b> | <b>1.0500e-003</b> |                | <b>9.7000e-004</b> | <b>9.7000e-004</b> | <b>0.0000</b> | <b>6.5304</b> | <b>6.5304</b> | <b>2.1100e-003</b> | <b>0.0000</b> | <b>6.5832</b> |

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

## 3.5 Racking/Other Mechanical - 2022

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.9000e-004        | 5.3300e-003        | 1.7900e-003        | 2.0000e-005        | 7.6000e-004        | 7.0000e-005        | 8.3000e-004        | 2.2000e-004        | 7.0000e-005        | 2.9000e-004        | 0.0000        | 2.1014        | 2.1014        | 2.0000e-005        | 3.1000e-004        | 2.1949        |
| Worker       | 6.3000e-004        | 4.9000e-004        | 6.1200e-003        | 2.0000e-005        | 1.9800e-003        | 1.0000e-005        | 1.9900e-003        | 5.3000e-004        | 1.0000e-005        | 5.3000e-004        | 0.0000        | 1.5544        | 1.5544        | 4.0000e-005        | 4.0000e-005        | 1.5683        |
| <b>Total</b> | <b>8.2000e-004</b> | <b>5.8200e-003</b> | <b>7.9100e-003</b> | <b>4.0000e-005</b> | <b>2.7400e-003</b> | <b>8.0000e-005</b> | <b>2.8200e-003</b> | <b>7.5000e-004</b> | <b>8.0000e-005</b> | <b>8.2000e-004</b> | <b>0.0000</b> | <b>3.6558</b> | <b>3.6558</b> | <b>6.0000e-005</b> | <b>3.5000e-004</b> | <b>3.7632</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 6.9200e-003        | 0.0724        | 0.0897        | 2.3000e-004        |               | 2.8600e-003        | 2.8600e-003        |                | 2.6400e-003        | 2.6400e-003        | 0.0000        | 20.2758        | 20.2758        | 6.5600e-003        | 0.0000        | 20.4397        |
| <b>Total</b> | <b>6.9200e-003</b> | <b>0.0724</b> | <b>0.0897</b> | <b>2.3000e-004</b> |               | <b>2.8600e-003</b> | <b>2.8600e-003</b> |                | <b>2.6400e-003</b> | <b>2.6400e-003</b> | <b>0.0000</b> | <b>20.2758</b> | <b>20.2758</b> | <b>6.5600e-003</b> | <b>0.0000</b> | <b>20.4397</b> |

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | 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       | 4.0000e-004        | 0.0128        | 5.0800e-003   | 7.0000e-005        | 2.3500e-003        | 1.1000e-004        | 2.4600e-003        | 6.8000e-004        | 1.0000e-004        | 7.8000e-004        | 0.0000        | 6.2589         | 6.2589         | 6.0000e-005        | 9.3000e-004        | 6.5363         |
| Worker       | 1.8100e-003        | 1.3400e-003   | 0.0175        | 5.0000e-005        | 6.1300e-003        | 3.0000e-005        | 6.1600e-003        | 1.6300e-003        | 3.0000e-005        | 1.6600e-003        | 0.0000        | 4.6641         | 4.6641         | 1.2000e-004        | 1.2000e-004        | 4.7039         |
| <b>Total</b> | <b>2.2100e-003</b> | <b>0.0141</b> | <b>0.0226</b> | <b>1.2000e-004</b> | <b>8.4800e-003</b> | <b>1.4000e-004</b> | <b>8.6200e-003</b> | <b>2.3100e-003</b> | <b>1.3000e-004</b> | <b>2.4400e-003</b> | <b>0.0000</b> | <b>10.9230</b> | <b>10.9230</b> | <b>1.8000e-004</b> | <b>1.0500e-003</b> | <b>11.2402</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 6.9200e-003        | 0.0724        | 0.0897        | 2.3000e-004        |               | 2.8600e-003        | 2.8600e-003        |                | 2.6400e-003        | 2.6400e-003        | 0.0000        | 20.2757        | 20.2757        | 6.5600e-003        | 0.0000        | 20.4397        |
| <b>Total</b> | <b>6.9200e-003</b> | <b>0.0724</b> | <b>0.0897</b> | <b>2.3000e-004</b> |               | <b>2.8600e-003</b> | <b>2.8600e-003</b> |                | <b>2.6400e-003</b> | <b>2.6400e-003</b> | <b>0.0000</b> | <b>20.2757</b> | <b>20.2757</b> | <b>6.5600e-003</b> | <b>0.0000</b> | <b>20.4397</b> |

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

## 3.5 Racking/Other Mechanical - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O                | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|--------------------|----------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |                |                |                    |                    |                |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000             | 0.0000         |
| Vendor       | 4.0000e-004        | 0.0128        | 5.0800e-003   | 7.0000e-005        | 2.3500e-003        | 1.1000e-004        | 2.4600e-003        | 6.8000e-004        | 1.0000e-004        | 7.8000e-004        | 0.0000        | 6.2589         | 6.2589         | 6.0000e-005        | 9.3000e-004        | 6.5363         |
| Worker       | 1.8100e-003        | 1.3400e-003   | 0.0175        | 5.0000e-005        | 6.1300e-003        | 3.0000e-005        | 6.1600e-003        | 1.6300e-003        | 3.0000e-005        | 1.6600e-003        | 0.0000        | 4.6641         | 4.6641         | 1.2000e-004        | 1.2000e-004        | 4.7039         |
| <b>Total</b> | <b>2.2100e-003</b> | <b>0.0141</b> | <b>0.0226</b> | <b>1.2000e-004</b> | <b>8.4800e-003</b> | <b>1.4000e-004</b> | <b>8.6200e-003</b> | <b>2.3100e-003</b> | <b>1.3000e-004</b> | <b>2.4400e-003</b> | <b>0.0000</b> | <b>10.9230</b> | <b>10.9230</b> | <b>1.8000e-004</b> | <b>1.0500e-003</b> | <b>11.2402</b> |

## 3.6 PV Panel Installation - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 1.0600e-003        | 0.0141        | 0.0230        | 3.0000e-005        |               | 4.5000e-004        | 4.5000e-004        |                | 4.2000e-004        | 4.2000e-004        | 0.0000        | 3.0434        | 3.0434        | 9.8000e-004        | 0.0000        | 3.0680        |
| <b>Total</b> | <b>1.0600e-003</b> | <b>0.0141</b> | <b>0.0230</b> | <b>3.0000e-005</b> |               | <b>4.5000e-004</b> | <b>4.5000e-004</b> |                | <b>4.2000e-004</b> | <b>4.2000e-004</b> | <b>0.0000</b> | <b>3.0434</b> | <b>3.0434</b> | <b>9.8000e-004</b> | <b>0.0000</b> | <b>3.0680</b> |

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

## 3.6 PV Panel Installation - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 3.0000e-004        | 9.6000e-003   | 3.8200e-003   | 5.0000e-005        | 1.7700e-003        | 8.0000e-005        | 1.8500e-003        | 5.1000e-004        | 8.0000e-005        | 5.9000e-004        | 0.0000        | 4.7110        | 4.7110        | 5.0000e-005        | 7.0000e-004        | 4.9198        |
| Worker       | 1.1700e-003        | 8.7000e-004   | 0.0113        | 3.0000e-005        | 3.9600e-003        | 2.0000e-005        | 3.9800e-003        | 1.0500e-003        | 2.0000e-005        | 1.0700e-003        | 0.0000        | 3.0091        | 3.0091        | 8.0000e-005        | 8.0000e-005        | 3.0348        |
| <b>Total</b> | <b>1.4700e-003</b> | <b>0.0105</b> | <b>0.0151</b> | <b>8.0000e-005</b> | <b>5.7300e-003</b> | <b>1.0000e-004</b> | <b>5.8300e-003</b> | <b>1.5600e-003</b> | <b>1.0000e-004</b> | <b>1.6600e-003</b> | <b>0.0000</b> | <b>7.7201</b> | <b>7.7201</b> | <b>1.3000e-004</b> | <b>7.8000e-004</b> | <b>7.9546</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 1.0600e-003        | 0.0141        | 0.0230        | 3.0000e-005        |               | 4.5000e-004        | 4.5000e-004        |                | 4.2000e-004        | 4.2000e-004        | 0.0000        | 3.0434        | 3.0434        | 9.8000e-004        | 0.0000        | 3.0680        |
| <b>Total</b> | <b>1.0600e-003</b> | <b>0.0141</b> | <b>0.0230</b> | <b>3.0000e-005</b> |               | <b>4.5000e-004</b> | <b>4.5000e-004</b> |                | <b>4.2000e-004</b> | <b>4.2000e-004</b> | <b>0.0000</b> | <b>3.0434</b> | <b>3.0434</b> | <b>9.8000e-004</b> | <b>0.0000</b> | <b>3.0680</b> |

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 3.0000e-004        | 9.6000e-003   | 3.8200e-003   | 5.0000e-005        | 1.7700e-003        | 8.0000e-005        | 1.8500e-003        | 5.1000e-004        | 8.0000e-005        | 5.9000e-004        | 0.0000        | 4.7110        | 4.7110        | 5.0000e-005        | 7.0000e-004        | 4.9198        |
| Worker       | 1.1700e-003        | 8.7000e-004   | 0.0113        | 3.0000e-005        | 3.9600e-003        | 2.0000e-005        | 3.9800e-003        | 1.0500e-003        | 2.0000e-005        | 1.0700e-003        | 0.0000        | 3.0091        | 3.0091        | 8.0000e-005        | 8.0000e-005        | 3.0348        |
| <b>Total</b> | <b>1.4700e-003</b> | <b>0.0105</b> | <b>0.0151</b> | <b>8.0000e-005</b> | <b>5.7300e-003</b> | <b>1.0000e-004</b> | <b>5.8300e-003</b> | <b>1.5600e-003</b> | <b>1.0000e-004</b> | <b>1.6600e-003</b> | <b>0.0000</b> | <b>7.7201</b> | <b>7.7201</b> | <b>1.3000e-004</b> | <b>7.8000e-004</b> | <b>7.9546</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 7.7000e-003        | 0.0965        | 0.0664        | 1.7000e-004        |               | 3.0200e-003        | 3.0200e-003        |                | 2.7800e-003        | 2.7800e-003        | 0.0000        | 14.5175        | 14.5175        | 4.7000e-003        | 0.0000        | 14.6348        |
| <b>Total</b> | <b>7.7000e-003</b> | <b>0.0965</b> | <b>0.0664</b> | <b>1.7000e-004</b> |               | <b>3.0200e-003</b> | <b>3.0200e-003</b> |                | <b>2.7800e-003</b> | <b>2.7800e-003</b> | <b>0.0000</b> | <b>14.5175</b> | <b>14.5175</b> | <b>4.7000e-003</b> | <b>0.0000</b> | <b>14.6348</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

## 3.7 Other Electrical - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 7.0000e-005        | 2.1900e-003        | 8.7000e-004        | 1.0000e-005        | 4.0000e-004        | 2.0000e-005        | 4.2000e-004        | 1.2000e-004        | 2.0000e-005        | 1.3000e-004        | 0.0000        | 1.0768        | 1.0768        | 1.0000e-005        | 1.6000e-004        | 1.1245        |
| Worker       | 8.3000e-004        | 6.2000e-004        | 8.0200e-003        | 2.0000e-005        | 2.8100e-003        | 1.0000e-005        | 2.8300e-003        | 7.5000e-004        | 1.0000e-005        | 7.6000e-004        | 0.0000        | 2.1398        | 2.1398        | 5.0000e-005        | 6.0000e-005        | 2.1581        |
| <b>Total</b> | <b>9.0000e-004</b> | <b>2.8100e-003</b> | <b>8.8900e-003</b> | <b>3.0000e-005</b> | <b>3.2100e-003</b> | <b>3.0000e-005</b> | <b>3.2500e-003</b> | <b>8.7000e-004</b> | <b>3.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>3.2166</b> | <b>3.2166</b> | <b>6.0000e-005</b> | <b>2.2000e-004</b> | <b>3.2826</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 7.7000e-003        | 0.0965        | 0.0664        | 1.7000e-004        |               | 3.0200e-003        | 3.0200e-003        |                | 2.7800e-003        | 2.7800e-003        | 0.0000        | 14.5174        | 14.5174        | 4.7000e-003        | 0.0000        | 14.6348        |
| <b>Total</b> | <b>7.7000e-003</b> | <b>0.0965</b> | <b>0.0664</b> | <b>1.7000e-004</b> |               | <b>3.0200e-003</b> | <b>3.0200e-003</b> |                | <b>2.7800e-003</b> | <b>2.7800e-003</b> | <b>0.0000</b> | <b>14.5174</b> | <b>14.5174</b> | <b>4.7000e-003</b> | <b>0.0000</b> | <b>14.6348</b> |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 7.0000e-005        | 2.1900e-003        | 8.7000e-004        | 1.0000e-005        | 4.0000e-004        | 2.0000e-005        | 4.2000e-004        | 1.2000e-004        | 2.0000e-005        | 1.3000e-004        | 0.0000        | 1.0768        | 1.0768        | 1.0000e-005        | 1.6000e-004        | 1.1245        |
| Worker       | 8.3000e-004        | 6.2000e-004        | 8.0200e-003        | 2.0000e-005        | 2.8100e-003        | 1.0000e-005        | 2.8300e-003        | 7.5000e-004        | 1.0000e-005        | 7.6000e-004        | 0.0000        | 2.1398        | 2.1398        | 5.0000e-005        | 6.0000e-005        | 2.1581        |
| <b>Total</b> | <b>9.0000e-004</b> | <b>2.8100e-003</b> | <b>8.8900e-003</b> | <b>3.0000e-005</b> | <b>3.2100e-003</b> | <b>3.0000e-005</b> | <b>3.2500e-003</b> | <b>8.7000e-004</b> | <b>3.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>3.2166</b> | <b>3.2166</b> | <b>6.0000e-005</b> | <b>2.2000e-004</b> | <b>3.2826</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

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

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

[illegible]

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

### Unmitigated

[illegible]

**Mitigated**

[illegible]

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.3 Energy by Land Use - Electricity****Unmitigated**

|                            | Electricity Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-----------------|---------------|---------------|---------------|---------------|
| Land Use                   | kWh/yr          | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0               | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | Electricity Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-----------------|---------------|---------------|---------------|---------------|
| Land Use                   | kWh/yr          | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0               | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**6.0 Area Detail****6.1 Mitigation Measures Area**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

|             | ROG     | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|-------------|---------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category    | tons/yr |        |             |        |               |              |            |                |               |             | MT/yr    |             |             |        |        |             |
| Mitigated   | 0.0205  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |
| Unmitigated | 0.0205  | 0.0000 | 8.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 1.5000e-004 | 1.5000e-004 | 0.0000 | 0.0000 | 1.6000e-004 |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 3.6300e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0169        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.5000e-004        | 1.5000e-004        | 0.0000        | 0.0000        | 1.6000e-004        |
| <b>Total</b>          | <b>0.0205</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr       |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 3.6300e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 0.0169        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 1.0000e-005   | 0.0000        | 8.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 1.5000e-004        | 1.5000e-004        | 0.0000        | 0.0000        | 1.6000e-004        |
| <b>Total</b>          | <b>0.0205</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.5000e-004</b> | <b>1.5000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>1.6000e-004</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

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

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
| Category    | MT/yr     |        |        |        |
| Mitigated   | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

**7.2 Water by Land Use****Unmitigated**

|                            | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                   | Mgal               | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.2 Water by Land Use****Mitigated**

|                            | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                   | Mgal               | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
|             | MT/yr     |        |        |        |
| Mitigated   | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.2 Waste by Land Use****Unmitigated**

|                            | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use                   | tons           | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | Waste Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|
| Land Use                   | tons           | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**9.0 Operational Offroad**

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

## RCCD Solar Plan Project - Norco College - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****RCCD Solar Plan Project - Moreno Valley****Riverside-South Coast County, Summer****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 2.70 | Acre   | 2.70        | 117,612.00         | 0          |

**1.2 Other Project Characteristics**

|                                |                   |                                |       |                                  |       |
|--------------------------------|-------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban             | <b>Wind Speed (m/s)</b>        | 2.4   | <b>Precipitation Freq (Days)</b> | 28    |
| <b>Climate Zone</b>            | 10                |                                |       | <b>Operational Year</b>          | 2023  |
| <b>Utility Company</b>         | Statewide Average |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 453.21            | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

Project Characteristics - Moreno Valley Utility not in the CalEEMod database. Statewide average GHG intensity factors used.

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

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Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

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On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 220.00        | 25.00     |
| tblConstructionPhase | NumDays        | 6.00          | 10.00     |
| tblConstructionPhase | NumDays        | 3.00          | 24.00     |
| tblConstructionPhase | NumDays        | 220.00        | 12.00     |
| tblConstructionPhase | NumDays        | 220.00        | 38.00     |
| tblConstructionPhase | PhaseEndDate   | 10/17/2023    | 3/14/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 1/17/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/5/2022     | 1/3/2023  |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 2/7/2023  |
| tblConstructionPhase | PhaseEndDate   | 8/20/2024     | 3/30/2023 |
| tblConstructionPhase | PhaseEndDate   | 6/24/2025     | 5/23/2023 |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 2/8/2023  |
| tblConstructionPhase | PhaseStartDate | 12/6/2022     | 1/4/2023  |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 1/18/2023 |
| tblConstructionPhase | PhaseStartDate | 10/18/2023    | 3/15/2023 |
| tblConstructionPhase | PhaseStartDate | 8/21/2024     | 3/31/2023 |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00    |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00     |
| tblOffRoadEquipment  | LoadFactor     | 0.40          | 0.40      |

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

|                     |                            |       |       |
|---------------------|----------------------------|-------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00  | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00 | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.4988 | 16.0129 | 8.4134  | 0.0217 | 7.3574        | 0.6758       | 8.0332     | 3.4988         | 0.6219        | 4.1207      | 0.0000   | 2,119.570<br>6 | 2,119.570<br>6 | 0.5759 | 0.0280 | 2,142.305<br>0 |
| 2023    | 1.2935 | 13.5386 | 12.9307 | 0.0233 | 7.3574        | 0.5470       | 7.9044     | 3.4988         | 0.5034        | 4.0021      | 0.0000   | 2,288.836<br>6 | 2,288.836<br>6 | 0.5752 | 0.0851 | 2,317.943<br>9 |
| Maximum | 1.4988 | 16.0129 | 12.9307 | 0.0233 | 7.3574        | 0.6758       | 8.0332     | 3.4988         | 0.6219        | 4.1207      | 0.0000   | 2,288.836<br>6 | 2,288.836<br>6 | 0.5759 | 0.0851 | 2,317.943<br>9 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.4988 | 16.0129 | 8.4134  | 0.0217 | 3.4620        | 0.6758       | 4.1377     | 1.6152         | 0.6219        | 2.2371      | 0.0000   | 2,119.570<br>6 | 2,119.570<br>6 | 0.5759 | 0.0280 | 2,142.305<br>0 |
| 2023    | 1.2935 | 13.5386 | 12.9307 | 0.0233 | 3.4620        | 0.5470       | 4.0090     | 1.6152         | 0.5034        | 2.1185      | 0.0000   | 2,288.836<br>6 | 2,288.836<br>6 | 0.5752 | 0.0851 | 2,317.943<br>9 |
| Maximum | 1.4988 | 16.0129 | 12.9307 | 0.0233 | 3.4620        | 0.6758       | 4.1377     | 1.6152         | 0.6219        | 2.2371      | 0.0000   | 2,288.836<br>6 | 2,288.836<br>6 | 0.5759 | 0.0851 | 2,317.943<br>9 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 52.95         | 0.00         | 48.88      | 53.84          | 0.00          | 46.38       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.2 Overall Operational****Unmitigated Operational**

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.0507        | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |               | 6.3000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>6.3000e-004</b> |

**Mitigated Operational**

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.0507        | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |               | 6.3000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>6.3000e-004</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

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

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name               | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|--------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation         | Site Preparation      | 12/1/2022  | 1/3/2023  | 5             | 24       |                   |
| 2            | Grading                  | Grading               | 1/4/2023   | 1/17/2023 | 5             | 10       |                   |
| 3            | Boring/Conduit           | Trenching             | 1/18/2023  | 2/7/2023  | 5             | 15       |                   |
| 4            | Racking/Other Mechanical | Building Construction | 2/8/2023   | 3/14/2023 | 5             | 25       |                   |
| 5            | PV Panel Installation    | Building Construction | 3/15/2023  | 3/30/2023 | 5             | 12       |                   |
| 6            | Other Electrical         | Building Construction | 3/31/2023  | 5/23/2023 | 5             | 38       |                   |

**Acres of Grading (Site Preparation Phase): 24****Acres of Grading (Grading Phase): 5****Acres of Paving: 2.7****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| Other Electrical         | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts              | 0      | 7.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts              | 0      | 7.00        | 89          | 0.20        |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| Racking/Other Mechanical | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Grading                  | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Site Preparation         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Forklifts                 | 0 | 7.00 | 89  | 0.20 |
| PV Panel Installation    | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Other Electrical         | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Grading                  | Rubber Tired Dozers       | 0 | 8.00 | 247 | 0.40 |
| Site Preparation         | Scrapers                  | 0 | 8.00 | 367 | 0.48 |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Other Electrical         | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Grading                  | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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 |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4070        | 15.6236        | 7.4996        | 0.0182        |               | 0.6698        | 0.6698        |                | 0.6162        | 0.6162        |          | 1,759.8356        | 1,759.8356        | 0.5692        |     | 1,774.0647        |
| <b>Total</b>  | <b>1.4070</b> | <b>15.6236</b> | <b>7.4996</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.6698</b> | <b>7.7524</b> | <b>3.4247</b>  | <b>0.6162</b> | <b>4.0409</b> |          | <b>1,759.8356</b> | <b>1,759.8356</b> | <b>0.5692</b> |     | <b>1,774.0647</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.0788        | 0.0511        | 0.7962        | 2.0300e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 205.3788        | 205.3788        | 5.1200e-003        | 5.0800e-003   | 207.0218        |
| <b>Total</b> | <b>0.0918</b> | <b>0.3894</b> | <b>0.9138</b> | <b>3.4900e-003</b> | <b>0.2748</b> | <b>5.9900e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.6900e-003</b> | <b>0.0797</b> |          | <b>359.7351</b> | <b>359.7351</b> | <b>6.7500e-003</b> | <b>0.0280</b> | <b>368.2403</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4070        | 15.6236        | 7.4996        | 0.0182        |               | 0.6698        | 0.6698        |                | 0.6162        | 0.6162        | 0.0000        | 1,759.8356        | 1,759.8356        | 0.5692        |     | 1,774.0647        |
| <b>Total</b>  | <b>1.4070</b> | <b>15.6236</b> | <b>7.4996</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.6698</b> | <b>3.8570</b> | <b>1.5411</b>  | <b>0.6162</b> | <b>2.1573</b> | <b>0.0000</b> | <b>1,759.8356</b> | <b>1,759.8356</b> | <b>0.5692</b> |     | <b>1,774.0647</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0130        | 0.3383        | 0.1176        | 1.4600e-003        | 0.0512        | 4.8800e-003        | 0.0561        | 0.0148         | 4.6700e-003        | 0.0194        |          | 154.3563        | 154.3563        | 1.6300e-003        | 0.0229        | 161.2184        |
| Worker       | 0.0788        | 0.0511        | 0.7962        | 2.0300e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 205.3788        | 205.3788        | 5.1200e-003        | 5.0800e-003   | 207.0218        |
| <b>Total</b> | <b>0.0918</b> | <b>0.3894</b> | <b>0.9138</b> | <b>3.4900e-003</b> | <b>0.2748</b> | <b>5.9900e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.6900e-003</b> | <b>0.0797</b> |          | <b>359.7351</b> | <b>359.7351</b> | <b>6.7500e-003</b> | <b>0.0280</b> | <b>368.2403</b> |

## 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 |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.2114        | 13.2321        | 6.9938        | 0.0182        |               | 0.5437        | 0.5437        |                | 0.5002        | 0.5002        |          | 1,759.7151        | 1,759.7151        | 0.5691        |     | 1,773.9433        |
| <b>Total</b>  | <b>1.2114</b> | <b>13.2321</b> | <b>6.9938</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.5437</b> | <b>7.6263</b> | <b>3.4247</b>  | <b>0.5002</b> | <b>3.9250</b> |          | <b>1,759.7151</b> | <b>1,759.7151</b> | <b>0.5691</b> |     | <b>1,773.9433</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.0200e-003   | 0.2614        | 0.1076        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1800e-003        | 0.0169        |          | 148.2168        | 148.2168        | 1.5100e-003        | 0.0219        | 154.7814        |
| Worker       | 0.0730        | 0.0451        | 0.7317        | 1.9700e-003        | 0.2236        | 1.0500e-003        | 0.2246        | 0.0593         | 9.6000e-004        | 0.0603        |          | 198.7481        | 198.7481        | 4.5900e-003        | 4.6900e-003   | 200.2612        |
| <b>Total</b> | <b>0.0820</b> | <b>0.3065</b> | <b>0.8394</b> | <b>3.3700e-003</b> | <b>0.2748</b> | <b>3.3300e-003</b> | <b>0.2781</b> | <b>0.0740</b>  | <b>3.1400e-003</b> | <b>0.0772</b> |          | <b>346.9649</b> | <b>346.9649</b> | <b>6.1000e-003</b> | <b>0.0266</b> | <b>355.0425</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 1.2114        | 13.2321        | 6.9938        | 0.0182        |               | 0.5437        | 0.5437        |                | 0.5002        | 0.5002        | 0.0000        | 1,759.715<br>1         | 1,759.715<br>1         | 0.5691        |     | 1,773.943<br>3         |
| <b>Total</b>  | <b>1.2114</b> | <b>13.2321</b> | <b>6.9938</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.5437</b> | <b>3.7309</b> | <b>1.5411</b>  | <b>0.5002</b> | <b>2.0414</b> | <b>0.0000</b> | <b>1,759.715<br/>1</b> | <b>1,759.715<br/>1</b> | <b>0.5691</b> |     | <b>1,773.943<br/>3</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.2 Site Preparation - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.0200e-003   | 0.2614        | 0.1076        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1800e-003        | 0.0169        |          | 148.2168        | 148.2168        | 1.5100e-003        | 0.0219        | 154.7814        |
| Worker       | 0.0730        | 0.0451        | 0.7317        | 1.9700e-003        | 0.2236        | 1.0500e-003        | 0.2246        | 0.0593         | 9.6000e-004        | 0.0603        |          | 198.7481        | 198.7481        | 4.5900e-003        | 4.6900e-003   | 200.2612        |
| <b>Total</b> | <b>0.0820</b> | <b>0.3065</b> | <b>0.8394</b> | <b>3.3700e-003</b> | <b>0.2748</b> | <b>3.3300e-003</b> | <b>0.2781</b> | <b>0.0740</b>  | <b>3.1400e-003</b> | <b>0.0772</b> |          | <b>346.9649</b> | <b>346.9649</b> | <b>6.1000e-003</b> | <b>0.0266</b> | <b>355.0425</b> |

**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 |               |               |               |               | 0.5303        | 0.0000        | 0.5303        | 0.0573         | 0.0000        | 0.0573        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.6866        | 7.7785        | 5.7528        | 0.0123        |               | 0.3140        | 0.3140        |                | 0.2889        | 0.2889        |          | 1,193.3295        | 1,193.3295        | 0.3860        |     | 1,202.9782        |
| <b>Total</b>  | <b>0.6866</b> | <b>7.7785</b> | <b>5.7528</b> | <b>0.0123</b> | <b>0.5303</b> | <b>0.3140</b> | <b>0.8443</b> | <b>0.0573</b>  | <b>0.2889</b> | <b>0.3462</b> |          | <b>1,193.3295</b> | <b>1,193.3295</b> | <b>0.3860</b> |     | <b>1,202.9782</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.3 Grading - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.0200e-003   | 0.2614        | 0.1076        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1800e-003        | 0.0169        |          | 148.2168        | 148.2168        | 1.5100e-003        | 0.0219        | 154.7814        |
| Worker       | 0.1022        | 0.0632        | 1.0244        | 2.7500e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 278.2473        | 278.2473        | 6.4300e-003        | 6.5700e-003   | 280.3656        |
| <b>Total</b> | <b>0.1113</b> | <b>0.3245</b> | <b>1.1321</b> | <b>4.1500e-003</b> | <b>0.3642</b> | <b>3.7400e-003</b> | <b>0.3680</b> | <b>0.0978</b>  | <b>3.5300e-003</b> | <b>0.1013</b> |          | <b>426.4641</b> | <b>426.4641</b> | <b>7.9400e-003</b> | <b>0.0285</b> | <b>435.1470</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.2386        | 0.0000        | 0.2386        | 0.0258         | 0.0000        | 0.0258        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.6866        | 7.7785        | 5.7528        | 0.0123        |               | 0.3140        | 0.3140        |                | 0.2889        | 0.2889        | 0.0000        | 1,193.3295        | 1,193.3295        | 0.3860        |     | 1,202.9782        |
| <b>Total</b>  | <b>0.6866</b> | <b>7.7785</b> | <b>5.7528</b> | <b>0.0123</b> | <b>0.2386</b> | <b>0.3140</b> | <b>0.5527</b> | <b>0.0258</b>  | <b>0.2889</b> | <b>0.3147</b> | <b>0.0000</b> | <b>1,193.3295</b> | <b>1,193.3295</b> | <b>0.3860</b> |     | <b>1,202.9782</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.3 Grading - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 9.0200e-003   | 0.2614        | 0.1076        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1800e-003        | 0.0169        |          | 148.2168        | 148.2168        | 1.5100e-003        | 0.0219        | 154.7814        |
| Worker       | 0.1022        | 0.0632        | 1.0244        | 2.7500e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 278.2473        | 278.2473        | 6.4300e-003        | 6.5700e-003   | 280.3656        |
| <b>Total</b> | <b>0.1113</b> | <b>0.3245</b> | <b>1.1321</b> | <b>4.1500e-003</b> | <b>0.3642</b> | <b>3.7400e-003</b> | <b>0.3680</b> | <b>0.0978</b>  | <b>3.5300e-003</b> | <b>0.1013</b> |          | <b>426.4641</b> | <b>426.4641</b> | <b>7.9400e-003</b> | <b>0.0285</b> | <b>435.1470</b> |

## 3.4 Boring/Conduit - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.9088        | 8.9777        | 11.6911        | 0.0177        |               | 0.4551        | 0.4551        |                | 0.4187        | 0.4187        |          | 1,714.1557        | 1,714.1557        | 0.5544        |     | 1,728.0155        |
| <b>Total</b> | <b>0.9088</b> | <b>8.9777</b> | <b>11.6911</b> | <b>0.0177</b> |               | <b>0.4551</b> | <b>0.4551</b> |                | <b>0.4187</b> | <b>0.4187</b> |          | <b>1,714.1557</b> | <b>1,714.1557</b> | <b>0.5544</b> |     | <b>1,728.0155</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.4 Boring/Conduit - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0180        | 0.5227        | 0.2152        | 2.8000e-003        | 0.1025        | 4.5500e-003        | 0.1070        | 0.0295         | 4.3600e-003        | 0.0339        |          | 296.4336        | 296.4336        | 3.0200e-003        | 0.0438        | 309.5628        |
| Worker       | 0.1022        | 0.0632        | 1.0244        | 2.7500e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 278.2473        | 278.2473        | 6.4300e-003        | 6.5700e-003   | 280.3656        |
| <b>Total</b> | <b>0.1203</b> | <b>0.5859</b> | <b>1.2397</b> | <b>5.5500e-003</b> | <b>0.4155</b> | <b>6.0100e-003</b> | <b>0.4215</b> | <b>0.1125</b>  | <b>5.7100e-003</b> | <b>0.1182</b> |          | <b>574.6809</b> | <b>574.6809</b> | <b>9.4500e-003</b> | <b>0.0504</b> | <b>589.9284</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.9088        | 8.9777        | 11.6911        | 0.0177        |               | 0.4551        | 0.4551        |                | 0.4187        | 0.4187        | 0.0000        | 1,714.1557        | 1,714.1557        | 0.5544        |     | 1,728.0155        |
| <b>Total</b> | <b>0.9088</b> | <b>8.9777</b> | <b>11.6911</b> | <b>0.0177</b> |               | <b>0.4551</b> | <b>0.4551</b> |                | <b>0.4187</b> | <b>0.4187</b> | <b>0.0000</b> | <b>1,714.1557</b> | <b>1,714.1557</b> | <b>0.5544</b> |     | <b>1,728.0155</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.4 Boring/Conduit - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0180        | 0.5227        | 0.2152        | 2.8000e-003        | 0.1025        | 4.5500e-003        | 0.1070        | 0.0295         | 4.3600e-003        | 0.0339        |          | 296.4336        | 296.4336        | 3.0200e-003        | 0.0438        | 309.5628        |
| Worker       | 0.1022        | 0.0632        | 1.0244        | 2.7500e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 278.2473        | 278.2473        | 6.4300e-003        | 6.5700e-003   | 280.3656        |
| <b>Total</b> | <b>0.1203</b> | <b>0.5859</b> | <b>1.2397</b> | <b>5.5500e-003</b> | <b>0.4155</b> | <b>6.0100e-003</b> | <b>0.4215</b> | <b>0.1125</b>  | <b>5.7100e-003</b> | <b>0.1182</b> |          | <b>574.6809</b> | <b>574.6809</b> | <b>9.4500e-003</b> | <b>0.0504</b> | <b>589.9284</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4461        | 4.6640        | 5.7792        | 0.0149        |               | 0.1850        | 0.1850        |                | 0.1702        | 0.1702        |          | 1,437.6295        | 1,437.6295        | 0.4650        |     | 1,449.2535        |
| <b>Total</b> | <b>0.4461</b> | <b>4.6640</b> | <b>5.7792</b> | <b>0.0149</b> |               | <b>0.1850</b> | <b>0.1850</b> |                | <b>0.1702</b> | <b>0.1702</b> |          | <b>1,437.6295</b> | <b>1,437.6295</b> | <b>0.4650</b> |     | <b>1,449.2535</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0271        | 0.7841        | 0.3229        | 4.1900e-003        | 0.1537        | 6.8300e-003        | 0.1606        | 0.0443         | 6.5300e-003        | 0.0508        |          | 444.6504        | 444.6504        | 4.5300e-003   | 0.0657        | 464.3442        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1585</b> | <b>0.8653</b> | <b>1.6400</b> | <b>7.7300e-003</b> | <b>0.5561</b> | <b>8.7100e-003</b> | <b>0.5648</b> | <b>0.1510</b>  | <b>8.2600e-003</b> | <b>0.1592</b> |          | <b>802.3969</b> | <b>802.3969</b> | <b>0.0128</b> | <b>0.0742</b> | <b>824.8142</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4461        | 4.6640        | 5.7792        | 0.0149        |               | 0.1850        | 0.1850        |                | 0.1702        | 0.1702        | 0.0000        | 1,437.6295        | 1,437.6295        | 0.4650        |     | 1,449.2535        |
| <b>Total</b> | <b>0.4461</b> | <b>4.6640</b> | <b>5.7792</b> | <b>0.0149</b> |               | <b>0.1850</b> | <b>0.1850</b> |                | <b>0.1702</b> | <b>0.1702</b> | <b>0.0000</b> | <b>1,437.6295</b> | <b>1,437.6295</b> | <b>0.4650</b> |     | <b>1,449.2535</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.5 Racking/Other Mechanical - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0271        | 0.7841        | 0.3229        | 4.1900e-003        | 0.1537        | 6.8300e-003        | 0.1606        | 0.0443         | 6.5300e-003        | 0.0508        |          | 444.6504        | 444.6504        | 4.5300e-003   | 0.0657        | 464.3442        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1585</b> | <b>0.8653</b> | <b>1.6400</b> | <b>7.7300e-003</b> | <b>0.5561</b> | <b>8.7100e-003</b> | <b>0.5648</b> | <b>0.1510</b>  | <b>8.2600e-003</b> | <b>0.1592</b> |          | <b>802.3969</b> | <b>802.3969</b> | <b>0.0128</b> | <b>0.0742</b> | <b>824.8142</b> |

**3.6 PV Panel Installation - 2023****Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        |          | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> |          | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.6 PV Panel Installation - 2023****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0316        | 0.9148        | 0.3767        | 4.8900e-003        | 0.1793        | 7.9700e-003        | 0.1873        | 0.0516         | 7.6200e-003        | 0.0593        |          | 518.7588        | 518.7588        | 5.2900e-003   | 0.0767        | 541.7348        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1630</b> | <b>0.9960</b> | <b>1.6938</b> | <b>8.4300e-003</b> | <b>0.5817</b> | <b>9.8500e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3500e-003</b> | <b>0.1677</b> |          | <b>876.5053</b> | <b>876.5053</b> | <b>0.0136</b> | <b>0.0851</b> | <b>902.2049</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        | 0.0000        | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> | <b>0.0000</b> | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0316        | 0.9148        | 0.3767        | 4.8900e-003        | 0.1793        | 7.9700e-003        | 0.1873        | 0.0516         | 7.6200e-003        | 0.0593        |          | 518.7588        | 518.7588        | 5.2900e-003   | 0.0767        | 541.7348        |
| Worker       | 0.1314        | 0.0812        | 1.3171        | 3.5400e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 357.7465        | 357.7465        | 8.2700e-003   | 8.4500e-003   | 360.4701        |
| <b>Total</b> | <b>0.1630</b> | <b>0.9960</b> | <b>1.6938</b> | <b>8.4300e-003</b> | <b>0.5817</b> | <b>9.8500e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3500e-003</b> | <b>0.1677</b> |          | <b>876.5053</b> | <b>876.5053</b> | <b>0.0136</b> | <b>0.0851</b> | <b>902.2049</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        |          | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> |          | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.5100e-003   | 0.1307        | 0.0538        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.1084         | 74.1084         | 7.6000e-004        | 0.0110        | 77.3907         |
| Worker       | 0.0584        | 0.0361        | 0.5854        | 1.5700e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 158.9985        | 158.9985        | 3.6800e-003        | 3.7500e-003   | 160.2089        |
| <b>Total</b> | <b>0.0629</b> | <b>0.1668</b> | <b>0.6392</b> | <b>2.2700e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>233.1069</b> | <b>233.1069</b> | <b>4.4400e-003</b> | <b>0.0147</b> | <b>237.5996</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        | 0.0000        | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> | <b>0.0000</b> | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.5100e-003   | 0.1307        | 0.0538        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.1084         | 74.1084         | 7.6000e-004        | 0.0110        | 77.3907         |
| Worker       | 0.0584        | 0.0361        | 0.5854        | 1.5700e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 158.9985        | 158.9985        | 3.6800e-003        | 3.7500e-003   | 160.2089        |
| <b>Total</b> | <b>0.0629</b> | <b>0.1668</b> | <b>0.6392</b> | <b>2.2700e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>233.1069</b> | <b>233.1069</b> | <b>4.4400e-003</b> | <b>0.0147</b> | <b>237.5996</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

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

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |        |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.0507 | 0.0000 | 2.8000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 5.9000e-004 | 5.9000e-004 | 0.0000 |     | 6.3000e-004 |
| Unmitigated | 0.0507 | 0.0000 | 2.8000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 5.9000e-004 | 5.9000e-004 | 0.0000 |     | 6.3000e-004 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****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 | 8.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0417        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 3.0000e-005   | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |     | 6.3000e-004        |
| <b>Total</b>          | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> |     | <b>6.3000e-004</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 8.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0417        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 3.0000e-005   | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |     | 6.3000e-004        |
| <b>Total</b>          | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> |     | <b>6.3000e-004</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****RCCD Solar Plan Project - Moreno Valley****Riverside-South Coast County, Winter****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 2.70 | Acre   | 2.70        | 117,612.00         | 0          |

**1.2 Other Project Characteristics**

|                                |                   |                                |       |                                  |       |
|--------------------------------|-------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban             | <b>Wind Speed (m/s)</b>        | 2.4   | <b>Precipitation Freq (Days)</b> | 28    |
| <b>Climate Zone</b>            | 10                |                                |       | <b>Operational Year</b>          | 2023  |
| <b>Utility Company</b>         | Statewide Average |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 453.21            | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

Project Characteristics - Moreno Valley Utility not in the CalEEMod database. Statewide average GHG intensity factors used.

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 220.00        | 25.00     |
| tblConstructionPhase | NumDays        | 6.00          | 10.00     |
| tblConstructionPhase | NumDays        | 3.00          | 24.00     |
| tblConstructionPhase | NumDays        | 220.00        | 12.00     |
| tblConstructionPhase | NumDays        | 220.00        | 38.00     |
| tblConstructionPhase | PhaseEndDate   | 10/17/2023    | 3/14/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 1/17/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/5/2022     | 1/3/2023  |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 2/7/2023  |
| tblConstructionPhase | PhaseEndDate   | 8/20/2024     | 3/30/2023 |
| tblConstructionPhase | PhaseEndDate   | 6/24/2025     | 5/23/2023 |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 2/8/2023  |
| tblConstructionPhase | PhaseStartDate | 12/6/2022     | 1/4/2023  |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 1/18/2023 |
| tblConstructionPhase | PhaseStartDate | 10/18/2023    | 3/15/2023 |
| tblConstructionPhase | PhaseStartDate | 8/21/2024     | 3/31/2023 |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00    |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00     |
| tblOffRoadEquipment  | LoadFactor     | 0.40          | 0.40      |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

|                     |                            |       |       |
|---------------------|----------------------------|-------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00  | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00 | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction (Maximum Daily Emission)****Unmitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.4930 | 16.0330 | 8.2670  | 0.0215 | 7.3574        | 0.6758       | 8.0332     | 3.4988         | 0.6219        | 4.1207      | 0.0000   | 2,100.391<br>7 | 2,100.391<br>7 | 0.5759 | 0.0281 | 2,123.173<br>3 |
| 2023    | 1.2882 | 13.5561 | 12.7454 | 0.0230 | 7.3574        | 0.5471       | 7.9044     | 3.4988         | 0.5034        | 4.0022      | 0.0000   | 2,263.443<br>6 | 2,263.443<br>6 | 0.5752 | 0.0856 | 2,292.638<br>2 |
| Maximum | 1.4930 | 16.0330 | 12.7454 | 0.0230 | 7.3574        | 0.6758       | 8.0332     | 3.4988         | 0.6219        | 4.1207      | 0.0000   | 2,263.443<br>6 | 2,263.443<br>6 | 0.5759 | 0.0856 | 2,292.638<br>2 |

**Mitigated Construction**

|         | ROG    | NOx     | CO      | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2      | Total CO2      | CH4    | N2O    | CO2e           |
|---------|--------|---------|---------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------------|----------------|--------|--------|----------------|
| Year    | lb/day |         |         |        |               |              |            |                |               |             | lb/day   |                |                |        |        |                |
| 2022    | 1.4930 | 16.0330 | 8.2670  | 0.0215 | 3.4620        | 0.6758       | 4.1378     | 1.6152         | 0.6219        | 2.2371      | 0.0000   | 2,100.391<br>7 | 2,100.391<br>7 | 0.5759 | 0.0281 | 2,123.173<br>3 |
| 2023    | 1.2882 | 13.5561 | 12.7454 | 0.0230 | 3.4620        | 0.5471       | 4.0090     | 1.6152         | 0.5034        | 2.1185      | 0.0000   | 2,263.443<br>6 | 2,263.443<br>6 | 0.5752 | 0.0856 | 2,292.638<br>2 |
| Maximum | 1.4930 | 16.0330 | 12.7454 | 0.0230 | 3.4620        | 0.6758       | 4.1378     | 1.6152         | 0.6219        | 2.2371      | 0.0000   | 2,263.443<br>6 | 2,263.443<br>6 | 0.5759 | 0.0856 | 2,292.638<br>2 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 52.95         | 0.00         | 48.88      | 53.84          | 0.00          | 46.38       | 0.00     | 0.00     | 0.00      | 0.00 | 0.00 | 0.00 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.0507        | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |               | 6.3000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>6.3000e-004</b> |

Mitigated Operational

|              | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.0507        | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |               | 6.3000e-004        |
| Energy       | 0.0000        | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>6.3000e-004</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

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

**3.0 Construction Detail****Construction Phase**

| Phase Number | Phase Name               | Phase Type            | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|--------------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation         | Site Preparation      | 12/1/2022  | 1/3/2023  | 5             | 24       |                   |
| 2            | Grading                  | Grading               | 1/4/2023   | 1/17/2023 | 5             | 10       |                   |
| 3            | Boring/Conduit           | Trenching             | 1/18/2023  | 2/7/2023  | 5             | 15       |                   |
| 4            | Racking/Other Mechanical | Building Construction | 2/8/2023   | 3/14/2023 | 5             | 25       |                   |
| 5            | PV Panel Installation    | Building Construction | 3/15/2023  | 3/30/2023 | 5             | 12       |                   |
| 6            | Other Electrical         | Building Construction | 3/31/2023  | 5/23/2023 | 5             | 38       |                   |

**Acres of Grading (Site Preparation Phase): 24****Acres of Grading (Grading Phase): 5****Acres of Paving: 2.7****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| Other Electrical         | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts              | 0      | 7.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                 | 0      | 8.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts              | 0      | 7.00        | 89          | 0.20        |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| Racking/Other Mechanical | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Grading                  | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Site Preparation         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Forklifts                 | 0 | 7.00 | 89  | 0.20 |
| PV Panel Installation    | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| Other Electrical         | Generator Sets            | 0 | 8.00 | 84  | 0.74 |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Grading                  | Rubber Tired Dozers       | 0 | 8.00 | 247 | 0.40 |
| Site Preparation         | Scrapers                  | 0 | 8.00 | 367 | 0.48 |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Other Electrical         | Tractors/Loaders/Backhoes | 0 | 6.00 | 97  | 0.37 |
| Grading                  | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****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 |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4070        | 15.6236        | 7.4996        | 0.0182        |               | 0.6698        | 0.6698        |                | 0.6162        | 0.6162        |          | 1,759.8356        | 1,759.8356        | 0.5692        |     | 1,774.0647        |
| <b>Total</b>  | <b>1.4070</b> | <b>15.6236</b> | <b>7.4996</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.6698</b> | <b>7.7524</b> | <b>3.4247</b>  | <b>0.6162</b> | <b>4.0409</b> |          | <b>1,759.8356</b> | <b>1,759.8356</b> | <b>0.5692</b> |     | <b>1,774.0647</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.0736        | 0.0530        | 0.6453        | 1.8400e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 186.0315        | 186.0315        | 5.0800e-003        | 5.2000e-003   | 187.7096        |
| <b>Total</b> | <b>0.0861</b> | <b>0.4094</b> | <b>0.7674</b> | <b>3.3000e-003</b> | <b>0.2748</b> | <b>6.0000e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.7000e-003</b> | <b>0.0797</b> |          | <b>340.5561</b> | <b>340.5561</b> | <b>6.6900e-003</b> | <b>0.0281</b> | <b>349.1086</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 1.4070        | 15.6236        | 7.4996        | 0.0182        |               | 0.6698        | 0.6698        |                | 0.6162        | 0.6162        | 0.0000        | 1,759.8356        | 1,759.8356        | 0.5692        |     | 1,774.0647        |
| <b>Total</b>  | <b>1.4070</b> | <b>15.6236</b> | <b>7.4996</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.6698</b> | <b>3.8570</b> | <b>1.5411</b>  | <b>0.6162</b> | <b>2.1573</b> | <b>0.0000</b> | <b>1,759.8356</b> | <b>1,759.8356</b> | <b>0.5692</b> |     | <b>1,774.0647</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0125        | 0.3564        | 0.1221        | 1.4600e-003        | 0.0512        | 4.8900e-003        | 0.0561        | 0.0148         | 4.6800e-003        | 0.0194        |          | 154.5246        | 154.5246        | 1.6100e-003        | 0.0229        | 161.3990        |
| Worker       | 0.0736        | 0.0530        | 0.6453        | 1.8400e-003        | 0.2236        | 1.1100e-003        | 0.2247        | 0.0593         | 1.0200e-003        | 0.0603        |          | 186.0315        | 186.0315        | 5.0800e-003        | 5.2000e-003   | 187.7096        |
| <b>Total</b> | <b>0.0861</b> | <b>0.4094</b> | <b>0.7674</b> | <b>3.3000e-003</b> | <b>0.2748</b> | <b>6.0000e-003</b> | <b>0.2808</b> | <b>0.0740</b>  | <b>5.7000e-003</b> | <b>0.0797</b> |          | <b>340.5561</b> | <b>340.5561</b> | <b>6.6900e-003</b> | <b>0.0281</b> | <b>349.1086</b> |

## 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 |               |                |               |               | 7.0826        | 0.0000        | 7.0826        | 3.4247         | 0.0000        | 3.4247        |          |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 1.2114        | 13.2321        | 6.9938        | 0.0182        |               | 0.5437        | 0.5437        |                | 0.5002        | 0.5002        |          | 1,759.715<br>1         | 1,759.715<br>1         | 0.5691        |     | 1,773.943<br>3         |
| <b>Total</b>  | <b>1.2114</b> | <b>13.2321</b> | <b>6.9938</b> | <b>0.0182</b> | <b>7.0826</b> | <b>0.5437</b> | <b>7.6263</b> | <b>3.4247</b>  | <b>0.5002</b> | <b>3.9250</b> |          | <b>1,759.715<br/>1</b> | <b>1,759.715<br/>1</b> | <b>0.5691</b> |     | <b>1,773.943<br/>3</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.3500e-003   | 0.2772        | 0.1112        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1900e-003        | 0.0169        |          | 148.5846        | 148.5846        | 1.4800e-003        | 0.0220        | 155.1702        |
| Worker       | 0.0684        | 0.0468        | 0.5942        | 1.7800e-003        | 0.2236        | 1.0500e-003        | 0.2246        | 0.0593         | 9.6000e-004        | 0.0603        |          | 180.0847        | 180.0847        | 4.5800e-003        | 4.8000e-003   | 181.6302        |
| <b>Total</b> | <b>0.0768</b> | <b>0.3240</b> | <b>0.7054</b> | <b>3.1800e-003</b> | <b>0.2748</b> | <b>3.3300e-003</b> | <b>0.2781</b> | <b>0.0740</b>  | <b>3.1500e-003</b> | <b>0.0772</b> |          | <b>328.6693</b> | <b>328.6693</b> | <b>6.0600e-003</b> | <b>0.0268</b> | <b>336.8004</b> |

Mitigated Construction On-Site

|               | ROG           | NOx            | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category      | lb/day        |                |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Fugitive Dust |               |                |               |               | 3.1872        | 0.0000        | 3.1872        | 1.5411         | 0.0000        | 1.5411        |               |                        | 0.0000                 |               |     | 0.0000                 |
| Off-Road      | 1.2114        | 13.2321        | 6.9938        | 0.0182        |               | 0.5437        | 0.5437        |                | 0.5002        | 0.5002        | 0.0000        | 1,759.715<br>1         | 1,759.715<br>1         | 0.5691        |     | 1,773.943<br>3         |
| <b>Total</b>  | <b>1.2114</b> | <b>13.2321</b> | <b>6.9938</b> | <b>0.0182</b> | <b>3.1872</b> | <b>0.5437</b> | <b>3.7309</b> | <b>1.5411</b>  | <b>0.5002</b> | <b>2.0414</b> | <b>0.0000</b> | <b>1,759.715<br/>1</b> | <b>1,759.715<br/>1</b> | <b>0.5691</b> |     | <b>1,773.943<br/>3</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.2 Site Preparation - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.3500e-003   | 0.2772        | 0.1112        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1900e-003        | 0.0169        |          | 148.5846        | 148.5846        | 1.4800e-003        | 0.0220        | 155.1702        |
| Worker       | 0.0684        | 0.0468        | 0.5942        | 1.7800e-003        | 0.2236        | 1.0500e-003        | 0.2246        | 0.0593         | 9.6000e-004        | 0.0603        |          | 180.0847        | 180.0847        | 4.5800e-003        | 4.8000e-003   | 181.6302        |
| <b>Total</b> | <b>0.0768</b> | <b>0.3240</b> | <b>0.7054</b> | <b>3.1800e-003</b> | <b>0.2748</b> | <b>3.3300e-003</b> | <b>0.2781</b> | <b>0.0740</b>  | <b>3.1500e-003</b> | <b>0.0772</b> |          | <b>328.6693</b> | <b>328.6693</b> | <b>6.0600e-003</b> | <b>0.0268</b> | <b>336.8004</b> |

## 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 |               |               |               |               | 0.5303        | 0.0000        | 0.5303        | 0.0573         | 0.0000        | 0.0573        |          |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.6866        | 7.7785        | 5.7528        | 0.0123        |               | 0.3140        | 0.3140        |                | 0.2889        | 0.2889        |          | 1,193.3295        | 1,193.3295        | 0.3860        |     | 1,202.9782        |
| <b>Total</b>  | <b>0.6866</b> | <b>7.7785</b> | <b>5.7528</b> | <b>0.0123</b> | <b>0.5303</b> | <b>0.3140</b> | <b>0.8443</b> | <b>0.0573</b>  | <b>0.2889</b> | <b>0.3462</b> |          | <b>1,193.3295</b> | <b>1,193.3295</b> | <b>0.3860</b> |     | <b>1,202.9782</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.3 Grading - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.3500e-003   | 0.2772        | 0.1112        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1900e-003        | 0.0169        |          | 148.5846        | 148.5846        | 1.4800e-003        | 0.0220        | 155.1702        |
| Worker       | 0.0958        | 0.0655        | 0.8319        | 2.4900e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 252.1186        | 252.1186        | 6.4100e-003        | 6.7200e-003   | 254.2823        |
| <b>Total</b> | <b>0.1042</b> | <b>0.3427</b> | <b>0.9431</b> | <b>3.8900e-003</b> | <b>0.3642</b> | <b>3.7400e-003</b> | <b>0.3680</b> | <b>0.0978</b>  | <b>3.5400e-003</b> | <b>0.1013</b> |          | <b>400.7032</b> | <b>400.7032</b> | <b>7.8900e-003</b> | <b>0.0287</b> | <b>409.4525</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Fugitive Dust |               |               |               |               | 0.2386        | 0.0000        | 0.2386        | 0.0258         | 0.0000        | 0.0258        |               |                   | 0.0000            |               |     | 0.0000            |
| Off-Road      | 0.6866        | 7.7785        | 5.7528        | 0.0123        |               | 0.3140        | 0.3140        |                | 0.2889        | 0.2889        | 0.0000        | 1,193.3295        | 1,193.3295        | 0.3860        |     | 1,202.9782        |
| <b>Total</b>  | <b>0.6866</b> | <b>7.7785</b> | <b>5.7528</b> | <b>0.0123</b> | <b>0.2386</b> | <b>0.3140</b> | <b>0.5527</b> | <b>0.0258</b>  | <b>0.2889</b> | <b>0.3147</b> | <b>0.0000</b> | <b>1,193.3295</b> | <b>1,193.3295</b> | <b>0.3860</b> |     | <b>1,202.9782</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.3 Grading - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 8.3500e-003   | 0.2772        | 0.1112        | 1.4000e-003        | 0.0512        | 2.2800e-003        | 0.0535        | 0.0148         | 2.1900e-003        | 0.0169        |          | 148.5846        | 148.5846        | 1.4800e-003        | 0.0220        | 155.1702        |
| Worker       | 0.0958        | 0.0655        | 0.8319        | 2.4900e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 252.1186        | 252.1186        | 6.4100e-003        | 6.7200e-003   | 254.2823        |
| <b>Total</b> | <b>0.1042</b> | <b>0.3427</b> | <b>0.9431</b> | <b>3.8900e-003</b> | <b>0.3642</b> | <b>3.7400e-003</b> | <b>0.3680</b> | <b>0.0978</b>  | <b>3.5400e-003</b> | <b>0.1013</b> |          | <b>400.7032</b> | <b>400.7032</b> | <b>7.8900e-003</b> | <b>0.0287</b> | <b>409.4525</b> |

**3.4 Boring/Conduit - 2023****Unmitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.9088        | 8.9777        | 11.6911        | 0.0177        |               | 0.4551        | 0.4551        |                | 0.4187        | 0.4187        |          | 1,714.1557        | 1,714.1557        | 0.5544        |     | 1,728.0155        |
| <b>Total</b> | <b>0.9088</b> | <b>8.9777</b> | <b>11.6911</b> | <b>0.0177</b> |               | <b>0.4551</b> | <b>0.4551</b> |                | <b>0.4187</b> | <b>0.4187</b> |          | <b>1,714.1557</b> | <b>1,714.1557</b> | <b>0.5544</b> |     | <b>1,728.0155</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.4 Boring/Conduit - 2023****Unmitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0167        | 0.5544        | 0.2225        | 2.8000e-003        | 0.1025        | 4.5700e-003        | 0.1071        | 0.0295         | 4.3700e-003        | 0.0339        |          | 297.1693        | 297.1693        | 2.9600e-003        | 0.0440        | 310.3404        |
| Worker       | 0.0958        | 0.0655        | 0.8319        | 2.4900e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 252.1186        | 252.1186        | 6.4100e-003        | 6.7200e-003   | 254.2823        |
| <b>Total</b> | <b>0.1125</b> | <b>0.6199</b> | <b>1.0543</b> | <b>5.2900e-003</b> | <b>0.4155</b> | <b>6.0300e-003</b> | <b>0.4215</b> | <b>0.1125</b>  | <b>5.7200e-003</b> | <b>0.1182</b> |          | <b>549.2878</b> | <b>549.2878</b> | <b>9.3700e-003</b> | <b>0.0507</b> | <b>564.6227</b> |

**Mitigated Construction On-Site**

|              | ROG           | NOx           | CO             | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |                |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.9088        | 8.9777        | 11.6911        | 0.0177        |               | 0.4551        | 0.4551        |                | 0.4187        | 0.4187        | 0.0000        | 1,714.1557        | 1,714.1557        | 0.5544        |     | 1,728.0155        |
| <b>Total</b> | <b>0.9088</b> | <b>8.9777</b> | <b>11.6911</b> | <b>0.0177</b> |               | <b>0.4551</b> | <b>0.4551</b> |                | <b>0.4187</b> | <b>0.4187</b> | <b>0.0000</b> | <b>1,714.1557</b> | <b>1,714.1557</b> | <b>0.5544</b> |     | <b>1,728.0155</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.4 Boring/Conduit - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 0.0167        | 0.5544        | 0.2225        | 2.8000e-003        | 0.1025        | 4.5700e-003        | 0.1071        | 0.0295         | 4.3700e-003        | 0.0339        |          | 297.1693        | 297.1693        | 2.9600e-003        | 0.0440        | 310.3404        |
| Worker       | 0.0958        | 0.0655        | 0.8319        | 2.4900e-003        | 0.3130        | 1.4600e-003        | 0.3144        | 0.0830         | 1.3500e-003        | 0.0844        |          | 252.1186        | 252.1186        | 6.4100e-003        | 6.7200e-003   | 254.2823        |
| <b>Total</b> | <b>0.1125</b> | <b>0.6199</b> | <b>1.0543</b> | <b>5.2900e-003</b> | <b>0.4155</b> | <b>6.0300e-003</b> | <b>0.4215</b> | <b>0.1125</b>  | <b>5.7200e-003</b> | <b>0.1182</b> |          | <b>549.2878</b> | <b>549.2878</b> | <b>9.3700e-003</b> | <b>0.0507</b> | <b>564.6227</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                   |                   |               |     |                   |
| Off-Road     | 0.4461        | 4.6640        | 5.7792        | 0.0149        |               | 0.1850        | 0.1850        |                | 0.1702        | 0.1702        |          | 1,437.6295        | 1,437.6295        | 0.4650        |     | 1,449.2535        |
| <b>Total</b> | <b>0.4461</b> | <b>4.6640</b> | <b>5.7792</b> | <b>0.0149</b> |               | <b>0.1850</b> | <b>0.1850</b> |                | <b>0.1702</b> | <b>0.1702</b> |          | <b>1,437.6295</b> | <b>1,437.6295</b> | <b>0.4650</b> |     | <b>1,449.2535</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0251        | 0.8316        | 0.3337        | 4.2000e-003        | 0.1537        | 6.8500e-003        | 0.1606        | 0.0443         | 6.5600e-003        | 0.0508        |          | 445.7539        | 445.7539        | 4.4400e-003   | 0.0659        | 465.5106        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1483</b> | <b>0.9158</b> | <b>1.4033</b> | <b>7.4100e-003</b> | <b>0.5561</b> | <b>8.7300e-003</b> | <b>0.5649</b> | <b>0.1510</b>  | <b>8.2900e-003</b> | <b>0.1593</b> |          | <b>769.9064</b> | <b>769.9064</b> | <b>0.0127</b> | <b>0.0746</b> | <b>792.4450</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2         | Total CO2         | CH4           | N2O | CO2e              |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-------------------|-------------------|---------------|-----|-------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                   |                   |               |     |                   |
| Off-Road     | 0.4461        | 4.6640        | 5.7792        | 0.0149        |               | 0.1850        | 0.1850        |                | 0.1702        | 0.1702        | 0.0000        | 1,437.6295        | 1,437.6295        | 0.4650        |     | 1,449.2535        |
| <b>Total</b> | <b>0.4461</b> | <b>4.6640</b> | <b>5.7792</b> | <b>0.0149</b> |               | <b>0.1850</b> | <b>0.1850</b> |                | <b>0.1702</b> | <b>0.1702</b> | <b>0.0000</b> | <b>1,437.6295</b> | <b>1,437.6295</b> | <b>0.4650</b> |     | <b>1,449.2535</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.5 Racking/Other Mechanical - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0251        | 0.8316        | 0.3337        | 4.2000e-003        | 0.1537        | 6.8500e-003        | 0.1606        | 0.0443         | 6.5600e-003        | 0.0508        |          | 445.7539        | 445.7539        | 4.4400e-003   | 0.0659        | 465.5106        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1483</b> | <b>0.9158</b> | <b>1.4033</b> | <b>7.4100e-003</b> | <b>0.5561</b> | <b>8.7300e-003</b> | <b>0.5649</b> | <b>0.1510</b>  | <b>8.2900e-003</b> | <b>0.1593</b> |          | <b>769.9064</b> | <b>769.9064</b> | <b>0.0127</b> | <b>0.0746</b> | <b>792.4450</b> |

## 3.6 PV Panel Installation - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day   |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        |          | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> |          | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.6 PV Panel Installation - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0292        | 0.9701        | 0.3893        | 4.9000e-003        | 0.1793        | 8.0000e-003        | 0.1873        | 0.0516         | 7.6500e-003        | 0.0593        |          | 520.0462        | 520.0462        | 5.1900e-003   | 0.0769        | 543.0957        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1524</b> | <b>1.0544</b> | <b>1.4589</b> | <b>8.1100e-003</b> | <b>0.5817</b> | <b>9.8800e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3800e-003</b> | <b>0.1677</b> |          | <b>844.1987</b> | <b>844.1987</b> | <b>0.0134</b> | <b>0.0856</b> | <b>870.0301</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2       | Total CO2       | CH4           | N2O | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|-----------------|-----------------|---------------|-----|-----------------|
| Category     | lb/day        |               |               |                    |               |               |               |                |               |               | lb/day        |                 |                 |               |     |                 |
| Off-Road     | 0.1063        | 1.4064        | 2.2987        | 3.4700e-003        |               | 0.0452        | 0.0452        |                | 0.0416        | 0.0416        | 0.0000        | 335.4725        | 335.4725        | 0.1085        |     | 338.1849        |
| <b>Total</b> | <b>0.1063</b> | <b>1.4064</b> | <b>2.2987</b> | <b>3.4700e-003</b> |               | <b>0.0452</b> | <b>0.0452</b> |                | <b>0.0416</b> | <b>0.0416</b> | <b>0.0000</b> | <b>335.4725</b> | <b>335.4725</b> | <b>0.1085</b> |     | <b>338.1849</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4           | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|---------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |               |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000        | 0.0000        | 0.0000          |
| Vendor       | 0.0292        | 0.9701        | 0.3893        | 4.9000e-003        | 0.1793        | 8.0000e-003        | 0.1873        | 0.0516         | 7.6500e-003        | 0.0593        |          | 520.0462        | 520.0462        | 5.1900e-003   | 0.0769        | 543.0957        |
| Worker       | 0.1232        | 0.0843        | 1.0695        | 3.2100e-003        | 0.4024        | 1.8800e-003        | 0.4043        | 0.1067         | 1.7300e-003        | 0.1085        |          | 324.1524        | 324.1524        | 8.2400e-003   | 8.6400e-003   | 326.9343        |
| <b>Total</b> | <b>0.1524</b> | <b>1.0544</b> | <b>1.4589</b> | <b>8.1100e-003</b> | <b>0.5817</b> | <b>9.8800e-003</b> | <b>0.5916</b> | <b>0.1584</b>  | <b>9.3800e-003</b> | <b>0.1677</b> |          | <b>844.1987</b> | <b>844.1987</b> | <b>0.0134</b> | <b>0.0856</b> | <b>870.0301</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        |          | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> |          | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 3.7 Other Electrical - 2023

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.1800e-003   | 0.1386        | 0.0556        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.2923         | 74.2923         | 7.4000e-004        | 0.0110        | 77.5851         |
| Worker       | 0.0548        | 0.0375        | 0.4754        | 1.4300e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 144.0678        | 144.0678        | 3.6600e-003        | 3.8400e-003   | 145.3041        |
| <b>Total</b> | <b>0.0589</b> | <b>0.1760</b> | <b>0.5310</b> | <b>2.1300e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>218.3601</b> | <b>218.3601</b> | <b>4.4000e-003</b> | <b>0.0148</b> | <b>222.8893</b> |

Mitigated Construction On-Site

|              | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2              | Total CO2              | CH4           | N2O | CO2e                   |
|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|------------------------|------------------------|---------------|-----|------------------------|
| Category     | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |                        |                        |               |     |                        |
| Off-Road     | 0.4815        | 6.0296        | 4.1527        | 0.0103        |               | 0.1886        | 0.1886        |                | 0.1735        | 0.1735        | 0.0000        | 1,000.172<br>2         | 1,000.172<br>2         | 0.3235        |     | 1,008.259<br>1         |
| <b>Total</b> | <b>0.4815</b> | <b>6.0296</b> | <b>4.1527</b> | <b>0.0103</b> |               | <b>0.1886</b> | <b>0.1886</b> |                | <b>0.1735</b> | <b>0.1735</b> | <b>0.0000</b> | <b>1,000.172<br/>2</b> | <b>1,000.172<br/>2</b> | <b>0.3235</b> |     | <b>1,008.259<br/>1</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | lb/day        |               |               |                    |               |                    |               |                |                    |               | lb/day   |                 |                 |                    |               |                 |
| Hauling      | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000         | 0.0000             | 0.0000        |          | 0.0000          | 0.0000          | 0.0000             | 0.0000        | 0.0000          |
| Vendor       | 4.1800e-003   | 0.1386        | 0.0556        | 7.0000e-004        | 0.0256        | 1.1400e-003        | 0.0268        | 7.3800e-003    | 1.0900e-003        | 8.4700e-003   |          | 74.2923         | 74.2923         | 7.4000e-004        | 0.0110        | 77.5851         |
| Worker       | 0.0548        | 0.0375        | 0.4754        | 1.4300e-003        | 0.1788        | 8.4000e-004        | 0.1797        | 0.0474         | 7.7000e-004        | 0.0482        |          | 144.0678        | 144.0678        | 3.6600e-003        | 3.8400e-003   | 145.3041        |
| <b>Total</b> | <b>0.0589</b> | <b>0.1760</b> | <b>0.5310</b> | <b>2.1300e-003</b> | <b>0.2045</b> | <b>1.9800e-003</b> | <b>0.2064</b> | <b>0.0548</b>  | <b>1.8600e-003</b> | <b>0.0567</b> |          | <b>218.3601</b> | <b>218.3601</b> | <b>4.4000e-003</b> | <b>0.0148</b> | <b>222.8893</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

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

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |        |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.0507 | 0.0000 | 2.8000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 5.9000e-004 | 5.9000e-004 | 0.0000 |     | 6.3000e-004 |
| Unmitigated | 0.0507 | 0.0000 | 2.8000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 5.9000e-004 | 5.9000e-004 | 0.0000 |     | 6.3000e-004 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****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 | 8.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0417        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 3.0000e-005   | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |     | 6.3000e-004        |
| <b>Total</b>          | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> |     | <b>6.3000e-004</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

|                       | ROG           | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |               |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 8.9600e-003   |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.0417        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 3.0000e-005   | 0.0000        | 2.8000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 5.9000e-004        | 5.9000e-004        | 0.0000        |     | 6.3000e-004        |
| <b>Total</b>          | <b>0.0507</b> | <b>0.0000</b> | <b>2.8000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>5.9000e-004</b> | <b>5.9000e-004</b> | <b>0.0000</b> |     | <b>6.3000e-004</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****RCCD Solar Plan Project - Moreno Valley****Riverside-South Coast County, Annual****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 2.70 | Acre   | 2.70        | 117,612.00         | 0          |

**1.2 Other Project Characteristics**

|                                |                   |                                |       |                                  |       |
|--------------------------------|-------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban             | <b>Wind Speed (m/s)</b>        | 2.4   | <b>Precipitation Freq (Days)</b> | 28    |
| <b>Climate Zone</b>            | 10                |                                |       | <b>Operational Year</b>          | 2023  |
| <b>Utility Company</b>         | Statewide Average |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 453.21            | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

Project Characteristics - Moreno Valley Utility not in the CalEEMod database. Statewide average GHG intensity factors used.

Land Use - Other non-asphalt surface area used as surrogate for solar PV array

Construction Phase - Adjusted based on applicant input

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - Adjusted equipment based on applicant info

Grading - Soils balanced on-site

Demolition - No demolition

Trips and VMT - Adjusted based on applicant input

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

On-road Fugitive Dust - Default

Architectural Coating - No coatings required

Vehicle Trips - Operational on-road vehicles modeled separately

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Construction Off-road Equipment Mitigation - Compliance with Rule 403 (water exposed area 2x per day)

Fleet Mix - Default

| Table Name           | Column Name    | Default Value | New Value |
|----------------------|----------------|---------------|-----------|
| tblConstructionPhase | NumDays        | 220.00        | 25.00     |
| tblConstructionPhase | NumDays        | 6.00          | 10.00     |
| tblConstructionPhase | NumDays        | 3.00          | 24.00     |
| tblConstructionPhase | NumDays        | 220.00        | 12.00     |
| tblConstructionPhase | NumDays        | 220.00        | 38.00     |
| tblConstructionPhase | PhaseEndDate   | 10/17/2023    | 3/14/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 1/17/2023 |
| tblConstructionPhase | PhaseEndDate   | 12/5/2022     | 1/3/2023  |
| tblConstructionPhase | PhaseEndDate   | 12/13/2022    | 2/7/2023  |
| tblConstructionPhase | PhaseEndDate   | 8/20/2024     | 3/30/2023 |
| tblConstructionPhase | PhaseEndDate   | 6/24/2025     | 5/23/2023 |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 2/8/2023  |
| tblConstructionPhase | PhaseStartDate | 12/6/2022     | 1/4/2023  |
| tblConstructionPhase | PhaseStartDate | 12/14/2022    | 1/18/2023 |
| tblConstructionPhase | PhaseStartDate | 10/18/2023    | 3/15/2023 |
| tblConstructionPhase | PhaseStartDate | 8/21/2024     | 3/31/2023 |
| tblOffRoadEquipment  | HorsePower     | 212.00        | 175.00    |
| tblOffRoadEquipment  | HorsePower     | 124.00        | 51.00     |
| tblOffRoadEquipment  | LoadFactor     | 0.40          | 0.40      |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|                     |                            |      |                         |
|---------------------|----------------------------|------|-------------------------|
| tblOffRoadEquipment | LoadFactor                 | 0.38 | 0.38                    |
| tblOffRoadEquipment | LoadFactor                 | 0.40 | 0.40                    |
| tblOffRoadEquipment | LoadFactor                 | 0.31 | 0.31                    |
| tblOffRoadEquipment | LoadFactor                 | 0.41 | 0.41                    |
| tblOffRoadEquipment | LoadFactor                 | 0.37 | 0.37                    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rubber Tired Dozers     |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Excavators              |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rollers                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Crawler Tractors        |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Off-Highway Tractors    |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Bore/Drill Rigs         |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Rough Terrain Forklifts |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Aerial Lifts            |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Graders                 |
| tblOffRoadEquipment | OffRoadEquipmentType       |      | Skid Steer Loaders      |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00 | 0.00                    |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|                     |                            |       |       |
|---------------------|----------------------------|-------|-------|
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 1.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 2.00  | 1.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | OffRoadEquipmentUnitAmount | 3.00  | 0.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblOffRoadEquipment | UsageHours                 | 7.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 16.00 |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 0.00  | 8.00  |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 24.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 28.00 |
| tblTripsAndVMT      | VendorTripNumber           | 19.00 | 4.00  |
| tblTripsAndVMT      | WorkerTripNumber           | 10.00 | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 20.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 8.00  | 28.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 36.00 |
| tblTripsAndVMT      | WorkerTripNumber           | 49.00 | 16.00 |

**2.0 Emissions Summary**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****2.1 Overall Construction****Unmitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e    |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |             |         |
| 2022    | 0.0164  | 0.1764 | 0.0913 | 2.4000e-004 | 0.0819        | 7.4300e-003  | 0.0894     | 0.0386         | 6.8400e-003   | 0.0454      | 0.0000   | 21.0023   | 21.0023   | 5.7500e-003 | 2.8000e-004 | 21.2299 |
| 2023    | 0.0319  | 0.3284 | 0.3401 | 8.6000e-004 | 0.0406        | 0.0120       | 0.0526     | 0.0102         | 0.0110        | 0.0212      | 0.0000   | 77.2200   | 77.2200   | 0.0179      | 2.0700e-003 | 78.2834 |
| Maximum | 0.0319  | 0.3284 | 0.3401 | 8.6000e-004 | 0.0819        | 0.0120       | 0.0894     | 0.0386         | 0.0110        | 0.0454      | 0.0000   | 77.2200   | 77.2200   | 0.0179      | 2.0700e-003 | 78.2834 |

**Mitigated Construction**

|         | ROG     | NOx    | CO     | SO2         | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4         | N2O         | CO2e    |
|---------|---------|--------|--------|-------------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|-------------|-------------|---------|
| Year    | tons/yr |        |        |             |               |              |            |                |               |             | MT/yr    |           |           |             |             |         |
| 2022    | 0.0164  | 0.1764 | 0.0913 | 2.4000e-004 | 0.0385        | 7.4300e-003  | 0.0459     | 0.0178         | 6.8400e-003   | 0.0247      | 0.0000   | 21.0022   | 21.0022   | 5.7500e-003 | 2.8000e-004 | 21.2298 |
| 2023    | 0.0319  | 0.3284 | 0.3401 | 8.6000e-004 | 0.0289        | 0.0120       | 0.0408     | 7.4500e-003    | 0.0110        | 0.0185      | 0.0000   | 77.2199   | 77.2199   | 0.0179      | 2.0700e-003 | 78.2833 |
| Maximum | 0.0319  | 0.3284 | 0.3401 | 8.6000e-004 | 0.0385        | 0.0120       | 0.0459     | 0.0178         | 0.0110        | 0.0247      | 0.0000   | 77.2199   | 77.2199   | 0.0179      | 2.0700e-003 | 78.2833 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|                   | ROG  | NOx  | CO   | SO2  | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4  | N2O  | CO2e |
|-------------------|------|------|------|------|---------------|--------------|------------|----------------|---------------|-------------|----------|----------|-----------|------|------|------|
| Percent Reduction | 0.00 | 0.00 | 0.00 | 0.00 | 45.04         | 0.00         | 38.89      | 48.21          | 0.00          | 35.30       | 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       | 12-1-2022  | 2-28-2023 | 0.3805                                       | 0.3805                                     |
| 2       | 3-1-2023   | 5-31-2023 | 0.1764                                       | 0.1764                                     |
|         |            | Highest   | 0.3805                                       | 0.3805                                     |

## 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     | 9.2400e-003 | 0.0000 | 3.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.0000 | 7.0000e-005 |
| Energy   | 0.0000      | 0.0000 | 0.0000      | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Mobile   | 0.0000      | 0.0000 | 0.0000      | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Waste    |             |        |             |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Water    |             |        |             |        |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 0.0000      | 0.0000      | 0.0000 | 0.0000 | 0.0000      |
| Total    | 9.2400e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      | 0.0000   | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.0000 | 7.0000e-005 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

## 2.2 Overall Operational

Mitigated Operational

|              | ROG                | NOx           | CO                 | SO2           | Fugitive 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         | 9.2400e-003        | 0.0000        | 3.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 7.0000e-005        | 7.0000e-005        | 0.0000        | 0.0000        | 7.0000e-005        |
| Energy       | 0.0000             | 0.0000        | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Waste        |                    |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Water        |                    |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>9.2400e-003</b> | <b>0.0000</b> | <b>3.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> |

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

## 3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name       | Phase Type       | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|------------------|------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Site Preparation | Site Preparation | 12/1/2022  | 1/3/2023  | 5             | 24       |                   |
| 2            | Grading          | Grading          | 1/4/2023   | 1/17/2023 | 5             | 10       |                   |
| 3            | Boring/Conduit   | Trenching        | 1/18/2023  | 2/7/2023  | 5             | 15       |                   |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|   |                          |                       |           |           |   |    |
|---|--------------------------|-----------------------|-----------|-----------|---|----|
| 4 | Racking/Other Mechanical | Building Construction | 2/8/2023  | 3/14/2023 | 5 | 25 |
| 5 | PV Panel Installation    | Building Construction | 3/15/2023 | 3/30/2023 | 5 | 12 |
| 6 | Other Electrical         | Building Construction | 3/31/2023 | 5/23/2023 | 5 | 38 |

**Acres of Grading (Site Preparation Phase): 24****Acres of Grading (Grading Phase): 5****Acres of Paving: 2.7****Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)****OffRoad Equipment**

| Phase Name               | Offroad Equipment Type    | Amount | Usage Hours | Horse Power | Load Factor |
|--------------------------|---------------------------|--------|-------------|-------------|-------------|
| PV Panel Installation    | Cranes                    | 0      | 8.00        | 231         | 0.29        |
| Other Electrical         | Cranes                    | 0      | 8.00        | 231         | 0.29        |
| PV Panel Installation    | Forklifts                 | 0      | 7.00        | 89          | 0.20        |
| Racking/Other Mechanical | Cranes                    | 0      | 8.00        | 231         | 0.29        |
| Racking/Other Mechanical | Forklifts                 | 0      | 7.00        | 89          | 0.20        |
| Racking/Other Mechanical | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Grading                  | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Site Preparation         | Graders                   | 1      | 8.00        | 187         | 0.41        |
| Other Electrical         | Forklifts                 | 0      | 7.00        | 89          | 0.20        |
| PV Panel Installation    | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| Other Electrical         | Generator Sets            | 0      | 8.00        | 84          | 0.74        |
| PV Panel Installation    | Tractors/Loaders/Backhoes | 0      | 6.00        | 97          | 0.37        |
| Grading                  | Rubber Tired Dozers       | 0      | 8.00        | 247         | 0.40        |
| Site Preparation         | Scrapers                  | 0      | 8.00        | 367         | 0.48        |
| Racking/Other Mechanical | Tractors/Loaders/Backhoes | 0      | 6.00        | 97          | 0.37        |
| Other Electrical         | Tractors/Loaders/Backhoes | 0      | 6.00        | 97          | 0.37        |
| Grading                  | Tractors/Loaders/Backhoes | 1      | 8.00        | 97          | 0.37        |

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

|                          |                           |   |      |     |      |
|--------------------------|---------------------------|---|------|-----|------|
| PV Panel Installation    | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Tractors/Loaders/Backhoes | 1 | 8.00 | 97  | 0.37 |
| Racking/Other Mechanical | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Other Electrical         | Welders                   | 0 | 8.00 | 46  | 0.45 |
| Site Preparation         | Rubber Tired Dozers       | 1 | 8.00 | 247 | 0.40 |
| Grading                  | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Excavators                | 1 | 8.00 | 158 | 0.38 |
| Boring/Conduit           | Rollers                   | 1 | 8.00 | 80  | 0.38 |
| Boring/Conduit           | Crawler Tractors          | 1 | 8.00 | 175 | 0.43 |
| Boring/Conduit           | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Racking/Other Mechanical | Off-Highway Tractors      | 1 | 8.00 | 51  | 0.44 |
| Racking/Other Mechanical | Bore/Drill Rigs           | 1 | 8.00 | 221 | 0.50 |
| PV Panel Installation    | Rough Terrain Forklifts   | 1 | 8.00 | 100 | 0.40 |
| Other Electrical         | Aerial Lifts              | 1 | 8.00 | 63  | 0.31 |
| Other Electrical         | Graders                   | 1 | 8.00 | 187 | 0.41 |
| Other Electrical         | Skid Steer Loaders        | 1 | 8.00 | 65  | 0.37 |

**Trips and VMT**

| Phase Name               | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|--------------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Boring/Conduit           | 4                       | 28.00              | 16.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Site Preparation         | 3                       | 20.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Grading                  | 3                       | 28.00              | 8.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Racking/Other Mechanical | 3                       | 36.00              | 24.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| PV Panel Installation    | 1                       | 36.00              | 28.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |
| Other Electrical         | 3                       | 16.00              | 4.00               | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

**3.1 Mitigation Measures Construction**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

Water Exposed Area

**3.2 Site Preparation - 2022****Unmitigated Construction On-Site**

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0790        | 0.0000             | 0.0790        | 0.0378         | 0.0000             | 0.0378        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0155        | 0.1719        | 0.0825        | 2.0000e-004        |               | 7.3700e-003        | 7.3700e-003   |                | 6.7800e-003        | 6.7800e-003   | 0.0000        | 17.5615        | 17.5615        | 5.6800e-003        | 0.0000        | 17.7035        |
| <b>Total</b>  | <b>0.0155</b> | <b>0.1719</b> | <b>0.0825</b> | <b>2.0000e-004</b> | <b>0.0790</b> | <b>7.3700e-003</b> | <b>0.0863</b> | <b>0.0378</b>  | <b>6.7800e-003</b> | <b>0.0446</b> | <b>0.0000</b> | <b>17.5615</b> | <b>17.5615</b> | <b>5.6800e-003</b> | <b>0.0000</b> | <b>17.7035</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

## 3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.4000e-004        | 3.9100e-003        | 1.3200e-003        | 2.0000e-005        | 5.6000e-004        | 5.0000e-005        | 6.1000e-004        | 1.6000e-004        | 5.0000e-005        | 2.1000e-004        | 0.0000        | 1.5410        | 1.5410        | 2.0000e-005        | 2.3000e-004        | 1.6096        |
| Worker       | 7.7000e-004        | 6.0000e-004        | 7.4800e-003        | 2.0000e-005        | 2.4200e-003        | 1.0000e-005        | 2.4300e-003        | 6.4000e-004        | 1.0000e-005        | 6.5000e-004        | 0.0000        | 1.8998        | 1.8998        | 5.0000e-005        | 5.0000e-005        | 1.9168        |
| <b>Total</b> | <b>9.1000e-004</b> | <b>4.5100e-003</b> | <b>8.8000e-003</b> | <b>4.0000e-005</b> | <b>2.9800e-003</b> | <b>6.0000e-005</b> | <b>3.0400e-003</b> | <b>8.0000e-004</b> | <b>6.0000e-005</b> | <b>8.6000e-004</b> | <b>0.0000</b> | <b>3.4408</b> | <b>3.4408</b> | <b>7.0000e-005</b> | <b>2.8000e-004</b> | <b>3.5264</b> |

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|---------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category      | tons/yr       |               |               |                    |               |                    |               |                |                    |               | MT/yr         |                |                |                    |               |                |
| Fugitive Dust |               |               |               |                    | 0.0355        | 0.0000             | 0.0355        | 0.0170         | 0.0000             | 0.0170        | 0.0000        | 0.0000         | 0.0000         | 0.0000             | 0.0000        | 0.0000         |
| Off-Road      | 0.0155        | 0.1719        | 0.0825        | 2.0000e-004        |               | 7.3700e-003        | 7.3700e-003   |                | 6.7800e-003        | 6.7800e-003   | 0.0000        | 17.5614        | 17.5614        | 5.6800e-003        | 0.0000        | 17.7034        |
| <b>Total</b>  | <b>0.0155</b> | <b>0.1719</b> | <b>0.0825</b> | <b>2.0000e-004</b> | <b>0.0355</b> | <b>7.3700e-003</b> | <b>0.0429</b> | <b>0.0170</b>  | <b>6.7800e-003</b> | <b>0.0238</b> | <b>0.0000</b> | <b>17.5614</b> | <b>17.5614</b> | <b>5.6800e-003</b> | <b>0.0000</b> | <b>17.7034</b> |

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

## 3.2 Site Preparation - 2022

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.4000e-004        | 3.9100e-003        | 1.3200e-003        | 2.0000e-005        | 5.6000e-004        | 5.0000e-005        | 6.1000e-004        | 1.6000e-004        | 5.0000e-005        | 2.1000e-004        | 0.0000        | 1.5410        | 1.5410        | 2.0000e-005        | 2.3000e-004        | 1.6096        |
| Worker       | 7.7000e-004        | 6.0000e-004        | 7.4800e-003        | 2.0000e-005        | 2.4200e-003        | 1.0000e-005        | 2.4300e-003        | 6.4000e-004        | 1.0000e-005        | 6.5000e-004        | 0.0000        | 1.8998        | 1.8998        | 5.0000e-005        | 5.0000e-005        | 1.9168        |
| <b>Total</b> | <b>9.1000e-004</b> | <b>4.5100e-003</b> | <b>8.8000e-003</b> | <b>4.0000e-005</b> | <b>2.9800e-003</b> | <b>6.0000e-005</b> | <b>3.0400e-003</b> | <b>8.0000e-004</b> | <b>6.0000e-005</b> | <b>8.6000e-004</b> | <b>0.0000</b> | <b>3.4408</b> | <b>3.4408</b> | <b>7.0000e-005</b> | <b>2.8000e-004</b> | <b>3.5264</b> |

## 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 |                    |               |                    |                    | 0.0188        | 0.0000             | 0.0188        | 4.6800e-003        | 0.0000             | 4.6800e-003        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 1.2100e-003        | 0.0132        | 6.9900e-003        | 2.0000e-005        |               | 5.4000e-004        | 5.4000e-004   |                    | 5.0000e-004        | 5.0000e-004        | 0.0000        | 1.5964        | 1.5964        | 5.2000e-004        | 0.0000        | 1.6093        |
| <b>Total</b>  | <b>1.2100e-003</b> | <b>0.0132</b> | <b>6.9900e-003</b> | <b>2.0000e-005</b> | <b>0.0188</b> | <b>5.4000e-004</b> | <b>0.0193</b> | <b>4.6800e-003</b> | <b>5.0000e-004</b> | <b>5.1800e-003</b> | <b>0.0000</b> | <b>1.5964</b> | <b>1.5964</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.6093</b> |

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

## 3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2           | Fugitive PM10      | Exhaust PM10  | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|--------------------|---------------|
| Category     | 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       | 1.0000e-005        | 2.7000e-004        | 1.1000e-004        | 0.0000        | 5.0000e-005        | 0.0000        | 5.0000e-005        | 1.0000e-005        | 0.0000        | 2.0000e-005        | 0.0000        | 0.1346        | 0.1346        | 0.0000        | 2.0000e-005        | 0.1406        |
| Worker       | 6.0000e-005        | 5.0000e-005        | 6.3000e-004        | 0.0000        | 2.2000e-004        | 0.0000        | 2.2000e-004        | 6.0000e-005        | 0.0000        | 6.0000e-005        | 0.0000        | 0.1672        | 0.1672        | 0.0000        | 0.0000             | 0.1686        |
| <b>Total</b> | <b>7.0000e-005</b> | <b>3.2000e-004</b> | <b>7.4000e-004</b> | <b>0.0000</b> | <b>2.7000e-004</b> | <b>0.0000</b> | <b>2.7000e-004</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>0.3018</b> | <b>0.3018</b> | <b>0.0000</b> | <b>2.0000e-005</b> | <b>0.3092</b> |

Mitigated Construction On-Site

|               | ROG                | NOx           | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |                    |                    | 8.4400e-003        | 0.0000             | 8.4400e-003        | 2.1100e-003        | 0.0000             | 2.1100e-003        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 1.2100e-003        | 0.0132        | 6.9900e-003        | 2.0000e-005        |                    | 5.4000e-004        | 5.4000e-004        |                    | 5.0000e-004        | 5.0000e-004        | 0.0000        | 1.5964        | 1.5964        | 5.2000e-004        | 0.0000        | 1.6093        |
| <b>Total</b>  | <b>1.2100e-003</b> | <b>0.0132</b> | <b>6.9900e-003</b> | <b>2.0000e-005</b> | <b>8.4400e-003</b> | <b>5.4000e-004</b> | <b>8.9800e-003</b> | <b>2.1100e-003</b> | <b>5.0000e-004</b> | <b>2.6100e-003</b> | <b>0.0000</b> | <b>1.5964</b> | <b>1.5964</b> | <b>5.2000e-004</b> | <b>0.0000</b> | <b>1.6093</b> |

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

## 3.2 Site Preparation - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2           | Fugitive PM10      | Exhaust PM10  | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5 | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |               |                    |               |                    |                    |               |                    | MT/yr         |               |               |               |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        |
| Vendor       | 1.0000e-005        | 2.7000e-004        | 1.1000e-004        | 0.0000        | 5.0000e-005        | 0.0000        | 5.0000e-005        | 1.0000e-005        | 0.0000        | 2.0000e-005        | 0.0000        | 0.1346        | 0.1346        | 0.0000        | 2.0000e-005        | 0.1406        |
| Worker       | 6.0000e-005        | 5.0000e-005        | 6.3000e-004        | 0.0000        | 2.2000e-004        | 0.0000        | 2.2000e-004        | 6.0000e-005        | 0.0000        | 6.0000e-005        | 0.0000        | 0.1672        | 0.1672        | 0.0000        | 0.0000             | 0.1686        |
| <b>Total</b> | <b>7.0000e-005</b> | <b>3.2000e-004</b> | <b>7.4000e-004</b> | <b>0.0000</b> | <b>2.7000e-004</b> | <b>0.0000</b> | <b>2.7000e-004</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>8.0000e-005</b> | <b>0.0000</b> | <b>0.3018</b> | <b>0.3018</b> | <b>0.0000</b> | <b>2.0000e-005</b> | <b>0.3092</b> |

## 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 |                    |               |               |                    | 2.6500e-003        | 0.0000             | 2.6500e-003        | 2.9000e-004        | 0.0000             | 2.9000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 3.4300e-003        | 0.0389        | 0.0288        | 6.0000e-005        |                    | 1.5700e-003        | 1.5700e-003        |                    | 1.4400e-003        | 1.4400e-003        | 0.0000        | 5.4129        | 5.4129        | 1.7500e-003        | 0.0000        | 5.4566        |
| <b>Total</b>  | <b>3.4300e-003</b> | <b>0.0389</b> | <b>0.0288</b> | <b>6.0000e-005</b> | <b>2.6500e-003</b> | <b>1.5700e-003</b> | <b>4.2200e-003</b> | <b>2.9000e-004</b> | <b>1.4400e-003</b> | <b>1.7300e-003</b> | <b>0.0000</b> | <b>5.4129</b> | <b>5.4129</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.4566</b> |

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

## 3.3 Grading - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 4.0000e-005        | 1.3700e-003        | 5.5000e-004        | 1.0000e-005        | 2.5000e-004        | 1.0000e-005        | 2.6000e-004        | 7.0000e-005        | 1.0000e-005        | 8.0000e-005        | 0.0000        | 0.6730        | 0.6730        | 1.0000e-005        | 1.0000e-004        | 0.7028        |
| Worker       | 4.5000e-004        | 3.4000e-004        | 4.3800e-003        | 1.0000e-005        | 1.5400e-003        | 1.0000e-005        | 1.5500e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.1702        | 1.1702        | 3.0000e-005        | 3.0000e-005        | 1.1802        |
| <b>Total</b> | <b>4.9000e-004</b> | <b>1.7100e-003</b> | <b>4.9300e-003</b> | <b>2.0000e-005</b> | <b>1.7900e-003</b> | <b>2.0000e-005</b> | <b>1.8100e-003</b> | <b>4.8000e-004</b> | <b>2.0000e-005</b> | <b>5.0000e-004</b> | <b>0.0000</b> | <b>1.8432</b> | <b>1.8432</b> | <b>4.0000e-005</b> | <b>1.3000e-004</b> | <b>1.8830</b> |

Mitigated Construction On-Site

|               | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category      | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |               |               |
| Fugitive Dust |                    |               |               |                    | 1.1900e-003        | 0.0000             | 1.1900e-003        | 1.3000e-004        | 0.0000             | 1.3000e-004        | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000        | 0.0000        |
| Off-Road      | 3.4300e-003        | 0.0389        | 0.0288        | 6.0000e-005        |                    | 1.5700e-003        | 1.5700e-003        |                    | 1.4400e-003        | 1.4400e-003        | 0.0000        | 5.4129        | 5.4129        | 1.7500e-003        | 0.0000        | 5.4566        |
| <b>Total</b>  | <b>3.4300e-003</b> | <b>0.0389</b> | <b>0.0288</b> | <b>6.0000e-005</b> | <b>1.1900e-003</b> | <b>1.5700e-003</b> | <b>2.7600e-003</b> | <b>1.3000e-004</b> | <b>1.4400e-003</b> | <b>1.5700e-003</b> | <b>0.0000</b> | <b>5.4129</b> | <b>5.4129</b> | <b>1.7500e-003</b> | <b>0.0000</b> | <b>5.4566</b> |

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

## 3.3 Grading - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 4.0000e-005        | 1.3700e-003        | 5.5000e-004        | 1.0000e-005        | 2.5000e-004        | 1.0000e-005        | 2.6000e-004        | 7.0000e-005        | 1.0000e-005        | 8.0000e-005        | 0.0000        | 0.6730        | 0.6730        | 1.0000e-005        | 1.0000e-004        | 0.7028        |
| Worker       | 4.5000e-004        | 3.4000e-004        | 4.3800e-003        | 1.0000e-005        | 1.5400e-003        | 1.0000e-005        | 1.5500e-003        | 4.1000e-004        | 1.0000e-005        | 4.2000e-004        | 0.0000        | 1.1702        | 1.1702        | 3.0000e-005        | 3.0000e-005        | 1.1802        |
| <b>Total</b> | <b>4.9000e-004</b> | <b>1.7100e-003</b> | <b>4.9300e-003</b> | <b>2.0000e-005</b> | <b>1.7900e-003</b> | <b>2.0000e-005</b> | <b>1.8100e-003</b> | <b>4.8000e-004</b> | <b>2.0000e-005</b> | <b>5.0000e-004</b> | <b>0.0000</b> | <b>1.8432</b> | <b>1.8432</b> | <b>4.0000e-005</b> | <b>1.3000e-004</b> | <b>1.8830</b> |

## 3.4 Boring/Conduit - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 6.8200e-003        | 0.0673        | 0.0877        | 1.3000e-004        |               | 3.4100e-003        | 3.4100e-003        |                | 3.1400e-003        | 3.1400e-003        | 0.0000        | 11.6629        | 11.6629        | 3.7700e-003        | 0.0000        | 11.7572        |
| <b>Total</b> | <b>6.8200e-003</b> | <b>0.0673</b> | <b>0.0877</b> | <b>1.3000e-004</b> |               | <b>3.4100e-003</b> | <b>3.4100e-003</b> |                | <b>3.1400e-003</b> | <b>3.1400e-003</b> | <b>0.0000</b> | <b>11.6629</b> | <b>11.6629</b> | <b>3.7700e-003</b> | <b>0.0000</b> | <b>11.7572</b> |

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

## 3.4 Boring/Conduit - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.3000e-004        | 4.1100e-003        | 1.6400e-003        | 2.0000e-005        | 7.6000e-004        | 3.0000e-005        | 7.9000e-004        | 2.2000e-004        | 3.0000e-005        | 2.5000e-004        | 0.0000        | 2.0190        | 2.0190        | 2.0000e-005        | 3.0000e-004        | 2.1085        |
| Worker       | 6.8000e-004        | 5.0000e-004        | 6.5700e-003        | 2.0000e-005        | 2.3100e-003        | 1.0000e-005        | 2.3200e-003        | 6.1000e-004        | 1.0000e-005        | 6.2000e-004        | 0.0000        | 1.7553        | 1.7553        | 4.0000e-005        | 5.0000e-005        | 1.7703        |
| <b>Total</b> | <b>8.1000e-004</b> | <b>4.6100e-003</b> | <b>8.2100e-003</b> | <b>4.0000e-005</b> | <b>3.0700e-003</b> | <b>4.0000e-005</b> | <b>3.1100e-003</b> | <b>8.3000e-004</b> | <b>4.0000e-005</b> | <b>8.7000e-004</b> | <b>0.0000</b> | <b>3.7743</b> | <b>3.7743</b> | <b>6.0000e-005</b> | <b>3.5000e-004</b> | <b>3.8788</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 6.8200e-003        | 0.0673        | 0.0877        | 1.3000e-004        |               | 3.4100e-003        | 3.4100e-003        |                | 3.1400e-003        | 3.1400e-003        | 0.0000        | 11.6629        | 11.6629        | 3.7700e-003        | 0.0000        | 11.7572        |
| <b>Total</b> | <b>6.8200e-003</b> | <b>0.0673</b> | <b>0.0877</b> | <b>1.3000e-004</b> |               | <b>3.4100e-003</b> | <b>3.4100e-003</b> |                | <b>3.1400e-003</b> | <b>3.1400e-003</b> | <b>0.0000</b> | <b>11.6629</b> | <b>11.6629</b> | <b>3.7700e-003</b> | <b>0.0000</b> | <b>11.7572</b> |

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

## 3.4 Boring/Conduit - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 1.3000e-004        | 4.1100e-003        | 1.6400e-003        | 2.0000e-005        | 7.6000e-004        | 3.0000e-005        | 7.9000e-004        | 2.2000e-004        | 3.0000e-005        | 2.5000e-004        | 0.0000        | 2.0190        | 2.0190        | 2.0000e-005        | 3.0000e-004        | 2.1085        |
| Worker       | 6.8000e-004        | 5.0000e-004        | 6.5700e-003        | 2.0000e-005        | 2.3100e-003        | 1.0000e-005        | 2.3200e-003        | 6.1000e-004        | 1.0000e-005        | 6.2000e-004        | 0.0000        | 1.7553        | 1.7553        | 4.0000e-005        | 5.0000e-005        | 1.7703        |
| <b>Total</b> | <b>8.1000e-004</b> | <b>4.6100e-003</b> | <b>8.2100e-003</b> | <b>4.0000e-005</b> | <b>3.0700e-003</b> | <b>4.0000e-005</b> | <b>3.1100e-003</b> | <b>8.3000e-004</b> | <b>4.0000e-005</b> | <b>8.7000e-004</b> | <b>0.0000</b> | <b>3.7743</b> | <b>3.7743</b> | <b>6.0000e-005</b> | <b>3.5000e-004</b> | <b>3.8788</b> |

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 5.5800e-003        | 0.0583        | 0.0722        | 1.9000e-004        |               | 2.3100e-003        | 2.3100e-003        |                | 2.1300e-003        | 2.1300e-003        | 0.0000        | 16.3024        | 16.3024        | 5.2700e-003        | 0.0000        | 16.4343        |
| <b>Total</b> | <b>5.5800e-003</b> | <b>0.0583</b> | <b>0.0722</b> | <b>1.9000e-004</b> |               | <b>2.3100e-003</b> | <b>2.3100e-003</b> |                | <b>2.1300e-003</b> | <b>2.1300e-003</b> | <b>0.0000</b> | <b>16.3024</b> | <b>16.3024</b> | <b>5.2700e-003</b> | <b>0.0000</b> | <b>16.4343</b> |

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

## 3.5 Racking/Other Mechanical - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 3.3000e-004        | 0.0103        | 4.1000e-003   | 5.0000e-005        | 1.9000e-003        | 9.0000e-005        | 1.9800e-003        | 5.5000e-004        | 8.0000e-005        | 6.3000e-004        | 0.0000        | 5.0475        | 5.0475        | 5.0000e-005        | 7.5000e-004        | 5.2712        |
| Worker       | 1.4600e-003        | 1.0800e-003   | 0.0141        | 4.0000e-005        | 4.9500e-003        | 2.0000e-005        | 4.9700e-003        | 1.3100e-003        | 2.0000e-005        | 1.3400e-003        | 0.0000        | 3.7613        | 3.7613        | 9.0000e-005        | 1.0000e-004        | 3.7935        |
| <b>Total</b> | <b>1.7900e-003</b> | <b>0.0114</b> | <b>0.0182</b> | <b>9.0000e-005</b> | <b>6.8500e-003</b> | <b>1.1000e-004</b> | <b>6.9500e-003</b> | <b>1.8600e-003</b> | <b>1.0000e-004</b> | <b>1.9700e-003</b> | <b>0.0000</b> | <b>8.8089</b> | <b>8.8089</b> | <b>1.4000e-004</b> | <b>8.5000e-004</b> | <b>9.0647</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 5.5800e-003        | 0.0583        | 0.0722        | 1.9000e-004        |               | 2.3100e-003        | 2.3100e-003        |                | 2.1300e-003        | 2.1300e-003        | 0.0000        | 16.3024        | 16.3024        | 5.2700e-003        | 0.0000        | 16.4342        |
| <b>Total</b> | <b>5.5800e-003</b> | <b>0.0583</b> | <b>0.0722</b> | <b>1.9000e-004</b> |               | <b>2.3100e-003</b> | <b>2.3100e-003</b> |                | <b>2.1300e-003</b> | <b>2.1300e-003</b> | <b>0.0000</b> | <b>16.3024</b> | <b>16.3024</b> | <b>5.2700e-003</b> | <b>0.0000</b> | <b>16.4342</b> |

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

## 3.5 Racking/Other Mechanical - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |               |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 3.3000e-004        | 0.0103        | 4.1000e-003   | 5.0000e-005        | 1.9000e-003        | 9.0000e-005        | 1.9800e-003        | 5.5000e-004        | 8.0000e-005        | 6.3000e-004        | 0.0000        | 5.0475        | 5.0475        | 5.0000e-005        | 7.5000e-004        | 5.2712        |
| Worker       | 1.4600e-003        | 1.0800e-003   | 0.0141        | 4.0000e-005        | 4.9500e-003        | 2.0000e-005        | 4.9700e-003        | 1.3100e-003        | 2.0000e-005        | 1.3400e-003        | 0.0000        | 3.7613        | 3.7613        | 9.0000e-005        | 1.0000e-004        | 3.7935        |
| <b>Total</b> | <b>1.7900e-003</b> | <b>0.0114</b> | <b>0.0182</b> | <b>9.0000e-005</b> | <b>6.8500e-003</b> | <b>1.1000e-004</b> | <b>6.9500e-003</b> | <b>1.8600e-003</b> | <b>1.0000e-004</b> | <b>1.9700e-003</b> | <b>0.0000</b> | <b>8.8089</b> | <b>8.8089</b> | <b>1.4000e-004</b> | <b>8.5000e-004</b> | <b>9.0647</b> |

## 3.6 PV Panel Installation - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 6.4000e-004        | 8.4400e-003        | 0.0138        | 2.0000e-005        |               | 2.7000e-004        | 2.7000e-004        |                | 2.5000e-004        | 2.5000e-004        | 0.0000        | 1.8260        | 1.8260        | 5.9000e-004        | 0.0000        | 1.8408        |
| <b>Total</b> | <b>6.4000e-004</b> | <b>8.4400e-003</b> | <b>0.0138</b> | <b>2.0000e-005</b> |               | <b>2.7000e-004</b> | <b>2.7000e-004</b> |                | <b>2.5000e-004</b> | <b>2.5000e-004</b> | <b>0.0000</b> | <b>1.8260</b> | <b>1.8260</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>1.8408</b> |

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

## 3.6 PV Panel Installation - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 1.8000e-004        | 5.7600e-003        | 2.2900e-003        | 3.0000e-005        | 1.0600e-003        | 5.0000e-005        | 1.1100e-003        | 3.1000e-004        | 5.0000e-005        | 3.5000e-004        | 0.0000        | 2.8266        | 2.8266        | 3.0000e-005        | 4.2000e-004        | 2.9519        |
| Worker       | 7.0000e-004        | 5.2000e-004        | 6.7600e-003        | 2.0000e-005        | 2.3700e-003        | 1.0000e-005        | 2.3900e-003        | 6.3000e-004        | 1.0000e-005        | 6.4000e-004        | 0.0000        | 1.8054        | 1.8054        | 5.0000e-005        | 5.0000e-005        | 1.8209        |
| <b>Total</b> | <b>8.8000e-004</b> | <b>6.2800e-003</b> | <b>9.0500e-003</b> | <b>5.0000e-005</b> | <b>3.4300e-003</b> | <b>6.0000e-005</b> | <b>3.5000e-003</b> | <b>9.4000e-004</b> | <b>6.0000e-005</b> | <b>9.9000e-004</b> | <b>0.0000</b> | <b>4.6321</b> | <b>4.6321</b> | <b>8.0000e-005</b> | <b>4.7000e-004</b> | <b>4.7727</b> |

Mitigated Construction On-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O           | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category     | tons/yr            |                    |               |                    |               |                    |                    |                |                    |                    | MT/yr         |               |               |                    |               |               |
| Off-Road     | 6.4000e-004        | 8.4400e-003        | 0.0138        | 2.0000e-005        |               | 2.7000e-004        | 2.7000e-004        |                | 2.5000e-004        | 2.5000e-004        | 0.0000        | 1.8260        | 1.8260        | 5.9000e-004        | 0.0000        | 1.8408        |
| <b>Total</b> | <b>6.4000e-004</b> | <b>8.4400e-003</b> | <b>0.0138</b> | <b>2.0000e-005</b> |               | <b>2.7000e-004</b> | <b>2.7000e-004</b> |                | <b>2.5000e-004</b> | <b>2.5000e-004</b> | <b>0.0000</b> | <b>1.8260</b> | <b>1.8260</b> | <b>5.9000e-004</b> | <b>0.0000</b> | <b>1.8408</b> |

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

## 3.6 PV Panel Installation - 2023

Mitigated Construction Off-Site

|              | ROG                | NOx                | CO                 | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |                    |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 1.8000e-004        | 5.7600e-003        | 2.2900e-003        | 3.0000e-005        | 1.0600e-003        | 5.0000e-005        | 1.1100e-003        | 3.1000e-004        | 5.0000e-005        | 3.5000e-004        | 0.0000        | 2.8266        | 2.8266        | 3.0000e-005        | 4.2000e-004        | 2.9519        |
| Worker       | 7.0000e-004        | 5.2000e-004        | 6.7600e-003        | 2.0000e-005        | 2.3700e-003        | 1.0000e-005        | 2.3900e-003        | 6.3000e-004        | 1.0000e-005        | 6.4000e-004        | 0.0000        | 1.8054        | 1.8054        | 5.0000e-005        | 5.0000e-005        | 1.8209        |
| <b>Total</b> | <b>8.8000e-004</b> | <b>6.2800e-003</b> | <b>9.0500e-003</b> | <b>5.0000e-005</b> | <b>3.4300e-003</b> | <b>6.0000e-005</b> | <b>3.5000e-003</b> | <b>9.4000e-004</b> | <b>6.0000e-005</b> | <b>9.9000e-004</b> | <b>0.0000</b> | <b>4.6321</b> | <b>4.6321</b> | <b>8.0000e-005</b> | <b>4.7000e-004</b> | <b>4.7727</b> |

## 3.7 Other Electrical - 2023

Unmitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 9.1500e-003        | 0.1146        | 0.0789        | 2.0000e-004        |               | 3.5800e-003        | 3.5800e-003        |                | 3.3000e-003        | 3.3000e-003        | 0.0000        | 17.2395        | 17.2395        | 5.5800e-003        | 0.0000        | 17.3789        |
| <b>Total</b> | <b>9.1500e-003</b> | <b>0.1146</b> | <b>0.0789</b> | <b>2.0000e-004</b> |               | <b>3.5800e-003</b> | <b>3.5800e-003</b> |                | <b>3.3000e-003</b> | <b>3.3000e-003</b> | <b>0.0000</b> | <b>17.2395</b> | <b>17.2395</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>17.3789</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

## 3.7 Other Electrical - 2023

Unmitigated Construction Off-Site

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | 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       | 8.0000e-005        | 2.6100e-003        | 1.0400e-003   | 1.0000e-005        | 4.8000e-004        | 2.0000e-005        | 5.0000e-004        | 1.4000e-004        | 2.0000e-005        | 1.6000e-004        | 0.0000        | 1.2787        | 1.2787        | 1.0000e-005        | 1.9000e-004        | 1.3354        |
| Worker       | 9.9000e-004        | 7.3000e-004        | 9.5200e-003   | 3.0000e-005        | 3.3400e-003        | 2.0000e-005        | 3.3600e-003        | 8.9000e-004        | 1.0000e-005        | 9.0000e-004        | 0.0000        | 2.5410        | 2.5410        | 6.0000e-005        | 7.0000e-005        | 2.5627        |
| <b>Total</b> | <b>1.0700e-003</b> | <b>3.3400e-003</b> | <b>0.0106</b> | <b>4.0000e-005</b> | <b>3.8200e-003</b> | <b>4.0000e-005</b> | <b>3.8600e-003</b> | <b>1.0300e-003</b> | <b>3.0000e-005</b> | <b>1.0600e-003</b> | <b>0.0000</b> | <b>3.8197</b> | <b>3.8197</b> | <b>7.0000e-005</b> | <b>2.6000e-004</b> | <b>3.8981</b> |

Mitigated Construction On-Site

|              | ROG                | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total         | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2      | Total CO2      | CH4                | N2O           | CO2e           |
|--------------|--------------------|---------------|---------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|----------------|----------------|--------------------|---------------|----------------|
| Category     | tons/yr            |               |               |                    |               |                    |                    |                |                    |                    | MT/yr         |                |                |                    |               |                |
| Off-Road     | 9.1500e-003        | 0.1146        | 0.0789        | 2.0000e-004        |               | 3.5800e-003        | 3.5800e-003        |                | 3.3000e-003        | 3.3000e-003        | 0.0000        | 17.2395        | 17.2395        | 5.5800e-003        | 0.0000        | 17.3789        |
| <b>Total</b> | <b>9.1500e-003</b> | <b>0.1146</b> | <b>0.0789</b> | <b>2.0000e-004</b> |               | <b>3.5800e-003</b> | <b>3.5800e-003</b> |                | <b>3.3000e-003</b> | <b>3.3000e-003</b> | <b>0.0000</b> | <b>17.2395</b> | <b>17.2395</b> | <b>5.5800e-003</b> | <b>0.0000</b> | <b>17.3789</b> |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****3.7 Other Electrical - 2023****Mitigated Construction Off-Site**

|              | ROG                | NOx                | CO            | SO2                | Fugitive PM10      | Exhaust PM10       | PM10 Total         | Fugitive PM2.5     | Exhaust PM2.5      | PM2.5 Total        | Bio- CO2      | NBio- CO2     | Total CO2     | CH4                | N2O                | CO2e          |
|--------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|--------------------|---------------|
| Category     | tons/yr            |                    |               |                    |                    |                    |                    |                    |                    |                    | MT/yr         |               |               |                    |                    |               |
| Hauling      | 0.0000             | 0.0000             | 0.0000        | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        |
| Vendor       | 8.0000e-005        | 2.6100e-003        | 1.0400e-003   | 1.0000e-005        | 4.8000e-004        | 2.0000e-005        | 5.0000e-004        | 1.4000e-004        | 2.0000e-005        | 1.6000e-004        | 0.0000        | 1.2787        | 1.2787        | 1.0000e-005        | 1.9000e-004        | 1.3354        |
| Worker       | 9.9000e-004        | 7.3000e-004        | 9.5200e-003   | 3.0000e-005        | 3.3400e-003        | 2.0000e-005        | 3.3600e-003        | 8.9000e-004        | 1.0000e-005        | 9.0000e-004        | 0.0000        | 2.5410        | 2.5410        | 6.0000e-005        | 7.0000e-005        | 2.5627        |
| <b>Total</b> | <b>1.0700e-003</b> | <b>3.3400e-003</b> | <b>0.0106</b> | <b>4.0000e-005</b> | <b>3.8200e-003</b> | <b>4.0000e-005</b> | <b>3.8600e-003</b> | <b>1.0300e-003</b> | <b>3.0000e-005</b> | <b>1.0600e-003</b> | <b>0.0000</b> | <b>3.8197</b> | <b>3.8197</b> | <b>7.0000e-005</b> | <b>2.6000e-004</b> | <b>3.8981</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

## 4.0 Operational Detail - Mobile

## 4.1 Mitigation Measures Mobile

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

## 4.2 Trip Summary Information

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

## 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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

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

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

[illegible]

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

### Unmitigated

[illegible]

**Mitigated**

[illegible]

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****5.3 Energy by Land Use - Electricity****Unmitigated**

|                            | Electricity Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-----------------|---------------|---------------|---------------|---------------|
| Land Use                   | kWh/yr          | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0               | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | Electricity Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-----------------|---------------|---------------|---------------|---------------|
| Land Use                   | kWh/yr          | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0               | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                 | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**6.0 Area Detail****6.1 Mitigation Measures Area**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|             | ROG         | NOx    | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O    | CO2e        |
|-------------|-------------|--------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|--------|-------------|
| Category    | tons/yr     |        |             |        |               |              |            |                |               |             | MT/yr    |             |             |        |        |             |
| Mitigated   | 9.2400e-003 | 0.0000 | 3.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.0000 | 7.0000e-005 |
| Unmitigated | 9.2400e-003 | 0.0000 | 3.0000e-005 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      | 0.0000   | 7.0000e-005 | 7.0000e-005 | 0.0000 | 0.0000 | 7.0000e-005 |

**6.2 Area by SubCategory****Unmitigated**

|                       | ROG                | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr            |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 1.6400e-003        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 7.6000e-003        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 0.0000             | 0.0000        | 3.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 7.0000e-005        | 7.0000e-005        | 0.0000        | 0.0000        | 7.0000e-005        |
| <b>Total</b>          | <b>9.2400e-003</b> | <b>0.0000</b> | <b>3.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> |

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**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****6.2 Area by SubCategory****Mitigated**

|                       | ROG                | NOx           | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|-----------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|--------------------|--------------------|---------------|---------------|--------------------|
| SubCategory           | tons/yr            |               |                    |               |               |               |               |                |               |               | MT/yr         |                    |                    |               |               |                    |
| Architectural Coating | 1.6400e-003        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Consumer Products     | 7.6000e-003        |               |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Landscaping           | 0.0000             | 0.0000        | 3.0000e-005        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 7.0000e-005        | 7.0000e-005        | 0.0000        | 0.0000        | 7.0000e-005        |
| <b>Total</b>          | <b>9.2400e-003</b> | <b>0.0000</b> | <b>3.0000e-005</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> | <b>7.0000e-005</b> | <b>0.0000</b> | <b>0.0000</b> | <b>7.0000e-005</b> |

**7.0 Water Detail****7.1 Mitigation Measures Water**

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

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

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
| Category    | MT/yr     |        |        |        |
| Mitigated   | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

**7.2 Water by Land Use****Unmitigated**

|                            | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                   | Mgal               | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****7.2 Water by Land Use****Mitigated**

|                            | Indoor/Outdoor Use | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|--------------------|---------------|---------------|---------------|---------------|
| Land Use                   | Mgal               | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0 / 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                    | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**8.0 Waste Detail****8.1 Mitigation Measures Waste****Category/Year**

|             | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|-----------|--------|--------|--------|
|             | MT/yr     |        |        |        |
| Mitigated   | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## RCCD Solar Plan Project - Moreno Valley - Riverside-South Coast County, Annual

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.2 Waste by Land Use****Unmitigated**

|                            | Waste<br>Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-------------------|---------------|---------------|---------------|---------------|
| Land Use                   | tons              | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0                 | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                   | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**Mitigated**

|                            | Waste<br>Disposed | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|-------------------|---------------|---------------|---------------|---------------|
| Land Use                   | tons              | MT/yr         |               |               |               |
| Other Non-Asphalt Surfaces | 0                 | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                   | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

**9.0 Operational Offroad**

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

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

10.0 Stationary Equipment

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Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

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

11.0 Vegetation

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## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****RCCD Solar Plan Project Operations - Max Day****Riverside-South Coast County, Summer****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 8.70 | Acre   | 8.70        | 378,972.00         | 0          |

**1.2 Other Project Characteristics**

|                                |                            |                                |       |                                  |       |
|--------------------------------|----------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                      | <b>Wind Speed (m/s)</b>        | 2.4   | <b>Precipitation Freq (Days)</b> | 28    |
| <b>Climate Zone</b>            | 10                         |                                |       | <b>Operational Year</b>          | 2023  |
| <b>Utility Company</b>         | Southern California Edison |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 390.98                     | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

Project Characteristics - RCCD Solar Plan project operations. Max day assuming inspection/maintenance plus panel washing on same day

Land Use - Other non-asphalt surface area used as surrogate for solar PV arrays

Construction Phase - Adjusted based on applicant input - maximum daily operations combined for Norco College and Moreno Valley solar

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - No off-road equipment required for operations

Trips and VMT - Assumes that as for a max day, 7 worker + 7 truck roundtrips (i.e., 14 one-way trips each) would occur on same day. For annual operations at both sites, the max day would be multiplied by 11 (i.e., 77 worker and 77 truck roundtrips per year total)

On-road Fugitive Dust - Default

Demolition - No demolition

Grading - No grading required for operations

Architectural Coating - No coatings required

Vehicle Trips - Operational trips modeled in the construction on-road vehicle module

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Water And Wastewater - Total outdoor water use ~6,000 gallons for annual panel washing, which would equate to ~545.5 gallons per day activity (i.e., parsed for 11 total days per year), based on input from applicant

Construction Off-road Equipment Mitigation -

Fleet Mix - Default

| Table Name           | Column Name                | Default Value | New Value |
|----------------------|----------------------------|---------------|-----------|
| tblConstructionPhase | NumDays                    | 10.00         | 1.00      |
| tblConstructionPhase | PhaseEndDate               | 10/13/2023    | 10/2/2023 |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00          | 0.00      |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 4.00          | 0.00      |
| tblTripsAndVMT       | VendorTripNumber           | 0.00          | 14.00     |
| tblTripsAndVMT       | WorkerTripNumber           | 0.00          | 14.00     |
| tblWater             | OutdoorWaterUseRate        | 0.00          | 545.50    |

**2.0 Emissions Summary**

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

### 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    | 0.0669 | 0.4890 | 0.7006 | 3.8300e-003 | 0.2462        | 4.7200e-003  | 0.2509     | 0.0673         | 4.4800e-003   | 0.0718      | 0.0000   | 398.5031  | 398.5031  | 5.8600e-003 | 0.0416 | 411.0502 |
| Maximum | 0.0669 | 0.4890 | 0.7006 | 3.8300e-003 | 0.2462        | 4.7200e-003  | 0.2509     | 0.0673         | 4.4800e-003   | 0.0718      | 0.0000   | 398.5031  | 398.5031  | 5.8600e-003 | 0.0416 | 411.0502 |

### 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    | 0.0669 | 0.4890 | 0.7006 | 3.8300e-003 | 0.2462        | 4.7200e-003  | 0.2509     | 0.0673         | 4.4800e-003   | 0.0718      | 0.0000   | 398.5031  | 398.5031  | 5.8600e-003 | 0.0416 | 411.0502 |
| Maximum | 0.0669 | 0.4890 | 0.7006 | 3.8300e-003 | 0.2462        | 4.7200e-003  | 0.2509     | 0.0673         | 4.4800e-003   | 0.0718      | 0.0000   | 398.5031  | 398.5031  | 5.8600e-003 | 0.0416 | 411.0502 |

[illegible]

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1632        | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |               | 2.0300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.0300e-003</b> |

Mitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1632        | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |               | 2.0300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.0300e-003</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

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

## 3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name          | Phase Type       | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|---------------------|------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Maintenance/Washing | Site Preparation | 10/2/2023  | 10/2/2023 | 5             | 1        |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.7

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

OffRoad Equipment

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

Trips and VMT

| Phase Name          | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Maintenance/Washing | 0                       | 14.00              | 14.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

## 3.1 Mitigation Measures Construction

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 3.2 Maintenance/Washing - 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 |               |               |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | 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       | 0.0158        | 0.4574        | 0.1883        | 2.4500e-003        | 0.0897        | 3.9800e-003        | 0.0937        | 0.0258         | 3.8100e-003        | 0.0296        |          | 259.3794        | 259.3794        | 2.6400e-003        | 0.0383        | 270.8674        |
| Worker       | 0.0511        | 0.0316        | 0.5122        | 1.3800e-003        | 0.1565        | 7.3000e-004        | 0.1572        | 0.0415         | 6.7000e-004        | 0.0422        |          | 139.1237        | 139.1237        | 3.2200e-003        | 3.2800e-003   | 140.1828        |
| <b>Total</b> | <b>0.0669</b> | <b>0.4890</b> | <b>0.7006</b> | <b>3.8300e-003</b> | <b>0.2462</b> | <b>4.7100e-003</b> | <b>0.2509</b> | <b>0.0673</b>  | <b>4.4800e-003</b> | <b>0.0718</b> |          | <b>398.5031</b> | <b>398.5031</b> | <b>5.8600e-003</b> | <b>0.0416</b> | <b>411.0502</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 3.2 Maintenance/Washing - 2023

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |               |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | 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       | 0.0158        | 0.4574        | 0.1883        | 2.4500e-003        | 0.0897        | 3.9800e-003        | 0.0937        | 0.0258         | 3.8100e-003        | 0.0296        |          | 259.3794        | 259.3794        | 2.6400e-003        | 0.0383        | 270.8674        |
| Worker       | 0.0511        | 0.0316        | 0.5122        | 1.3800e-003        | 0.1565        | 7.3000e-004        | 0.1572        | 0.0415         | 6.7000e-004        | 0.0422        |          | 139.1237        | 139.1237        | 3.2200e-003        | 3.2800e-003   | 140.1828        |
| <b>Total</b> | <b>0.0669</b> | <b>0.4890</b> | <b>0.7006</b> | <b>3.8300e-003</b> | <b>0.2462</b> | <b>4.7100e-003</b> | <b>0.2509</b> | <b>0.0673</b>  | <b>4.4800e-003</b> | <b>0.0718</b> |          | <b>398.5031</b> | <b>398.5031</b> | <b>5.8600e-003</b> | <b>0.0416</b> | <b>411.0502</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

**4.2 Trip Summary Information**

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

**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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

|                            | NaturalGas Use | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|----------------------------|----------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Land Use                   | kBTU/yr        | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Other Non-Asphalt Surfaces | 0              | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total                      |                | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|-------------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |             |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.1632 | 1.0000e-005 | 8.9000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.9000e-003 | 1.9000e-003 | 0.0000 |     | 2.0300e-003 |
| Unmitigated | 0.1632 | 1.0000e-005 | 8.9000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.9000e-003 | 1.9000e-003 | 0.0000 |     | 2.0300e-003 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 6.2 Area by SubCategory

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 | 0.0289        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1342        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 8.0000e-005   | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |     | 2.0300e-003        |
| <b>Total</b>          | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> |     | <b>2.0300e-003</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

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

## 6.2 Area by SubCategory

Mitigated

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0289        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1342        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 8.0000e-005   | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |     | 2.0300e-003        |
| <b>Total</b>          | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> |     | <b>2.0300e-003</b> |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Summer

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****RCCD Solar Plan Project Operations - Max Day****Riverside-South Coast County, Winter****1.0 Project Characteristics****1.1 Land Usage**

| Land Uses                  | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 8.70 | Acre   | 8.70        | 378,972.00         | 0          |

**1.2 Other Project Characteristics**

|                                |                            |                                |       |                                  |       |
|--------------------------------|----------------------------|--------------------------------|-------|----------------------------------|-------|
| <b>Urbanization</b>            | Urban                      | <b>Wind Speed (m/s)</b>        | 2.4   | <b>Precipitation Freq (Days)</b> | 28    |
| <b>Climate Zone</b>            | 10                         |                                |       | <b>Operational Year</b>          | 2023  |
| <b>Utility Company</b>         | Southern California Edison |                                |       |                                  |       |
| <b>CO2 Intensity (lb/MWhr)</b> | 390.98                     | <b>CH4 Intensity (lb/MWhr)</b> | 0.033 | <b>N2O Intensity (lb/MWhr)</b>   | 0.004 |

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

Project Characteristics - RCCD Solar Plan project operations. Max day assuming inspection/maintenance plus panel washing on same day

Land Use - Other non-asphalt surface area used as surrogate for solar PV arrays

Construction Phase - Adjusted based on applicant input - maximum daily operations combined for Norco College and Moreno Valley solar

Off-road Equipment - Adjusted equipment based on applicant info

Off-road Equipment - No off-road equipment required for operations

Trips and VMT - Assumes that as for a max day, 7 worker + 7 truck roundtrips (i.e., 14 one-way trips each) would occur on same day. For annual operations at both sites, the max day would be multiplied by 11 (i.e., 77 worker and 77 truck roundtrips per year total)

On-road Fugitive Dust - Default

Demolition - No demolition

Grading - No grading required for operations

Architectural Coating - No coatings required

Vehicle Trips - Operational trips modeled in the construction on-road vehicle module

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Vehicle Emission Factors - Default

Water And Wastewater - Total outdoor water use ~6,000 gallons for annual panel washing, which would equate to ~545.5 gallons per day activity (i.e., parsed for 11 total days per year), based on input from applicant

Construction Off-road Equipment Mitigation -

Fleet Mix - Default

| Table Name           | Column Name                | Default Value | New Value |
|----------------------|----------------------------|---------------|-----------|
| tblConstructionPhase | NumDays                    | 10.00         | 1.00      |
| tblConstructionPhase | PhaseEndDate               | 10/13/2023    | 10/2/2023 |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 3.00          | 0.00      |
| tblOffRoadEquipment  | OffRoadEquipmentUnitAmount | 4.00          | 0.00      |
| tblTripsAndVMT       | VendorTripNumber           | 0.00          | 14.00     |
| tblTripsAndVMT       | WorkerTripNumber           | 0.00          | 14.00     |
| tblWater             | OutdoorWaterUseRate        | 0.00          | 545.50    |

**2.0 Emissions Summary**

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

### 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    | 0.0625 | 0.5178 | 0.6106 | 3.7000e-003 | 0.2462        | 4.7300e-003  | 0.2509     | 0.0673         | 4.5000e-003   | 0.0718      | 0.0000   | 386.0824  | 386.0824  | 5.8000e-003 | 0.0418 | 398.6890 |
| Maximum | 0.0625 | 0.5178 | 0.6106 | 3.7000e-003 | 0.2462        | 4.7300e-003  | 0.2509     | 0.0673         | 4.5000e-003   | 0.0718      | 0.0000   | 386.0824  | 386.0824  | 5.8000e-003 | 0.0418 | 398.6890 |

### **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    | 0.0625 | 0.5178 | 0.6106 | 3.7000e-003 | 0.2462        | 4.7300e-003  | 0.2509     | 0.0673         | 4.5000e-003   | 0.0718      | 0.0000   | 386.0824  | 386.0824  | 5.8000e-003 | 0.0418 | 398.6890 |
| Maximum | 0.0625 | 0.5178 | 0.6106 | 3.7000e-003 | 0.2462        | 4.7300e-003  | 0.2509     | 0.0673         | 4.5000e-003   | 0.0718      | 0.0000   | 386.0824  | 386.0824  | 5.8000e-003 | 0.0418 | 398.6890 |

[illegible]

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 2.2 Overall Operational

Unmitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1632        | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |               | 2.0300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.0300e-003</b> |

Mitigated Operational

|              | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O           | CO2e               |
|--------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|---------------|--------------------|
| Category     | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |               |                    |
| Area         | 0.1632        | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |               | 2.0300e-003        |
| Energy       | 0.0000        | 0.0000             | 0.0000             | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| Mobile       | 0.0000        | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          | 0.0000             | 0.0000             | 0.0000        | 0.0000        | 0.0000             |
| <b>Total</b> | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> | <b>0.0000</b> | <b>2.0300e-003</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

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

## 3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name          | Phase Type       | Start Date | End Date  | Num Days Week | Num Days | Phase Description |
|--------------|---------------------|------------------|------------|-----------|---------------|----------|-------------------|
| 1            | Maintenance/Washing | Site Preparation | 10/2/2023  | 10/2/2023 | 5             | 1        |                   |

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 8.7

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

OffRoad Equipment

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

Trips and VMT

| Phase Name          | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Maintenance/Washing | 0                       | 14.00              | 14.00              | 0.00                | 14.70              | 6.90               | 20.00               | LD_Mix               | HDT_Mix              | HHDT                  |

## 3.1 Mitigation Measures Construction

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 3.2 Maintenance/Washing - 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 |               |               |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |          |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

Unmitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | 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       | 0.0146        | 0.4851        | 0.1947        | 2.4500e-003        | 0.0897        | 4.0000e-003        | 0.0937        | 0.0258         | 3.8200e-003        | 0.0296        |          | 260.0231        | 260.0231        | 2.5900e-003        | 0.0385        | 271.5479        |
| Worker       | 0.0479        | 0.0328        | 0.4159        | 1.2500e-003        | 0.1565        | 7.3000e-004        | 0.1572        | 0.0415         | 6.7000e-004        | 0.0422        |          | 126.0593        | 126.0593        | 3.2100e-003        | 3.3600e-003   | 127.1411        |
| <b>Total</b> | <b>0.0625</b> | <b>0.5178</b> | <b>0.6106</b> | <b>3.7000e-003</b> | <b>0.2462</b> | <b>4.7300e-003</b> | <b>0.2509</b> | <b>0.0673</b>  | <b>4.4900e-003</b> | <b>0.0718</b> |          | <b>386.0824</b> | <b>386.0824</b> | <b>5.8000e-003</b> | <b>0.0418</b> | <b>398.6890</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 3.2 Maintenance/Washing - 2023

Mitigated Construction On-Site

|               | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2      | NBio- CO2     | Total CO2     | CH4           | N2O | CO2e          |
|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|-----|---------------|
| Category      | lb/day        |               |               |               |               |               |               |                |               |               | lb/day        |               |               |               |     |               |
| Fugitive Dust |               |               |               |               | 0.0000        | 0.0000        | 0.0000        | 0.0000         | 0.0000        | 0.0000        |               |               | 0.0000        |               |     | 0.0000        |
| Off-Road      | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |     | 0.0000        |
| <b>Total</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b>  | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |     | <b>0.0000</b> |

Mitigated Construction Off-Site

|              | ROG           | NOx           | CO            | SO2                | Fugitive PM10 | Exhaust PM10       | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5      | PM2.5 Total   | Bio- CO2 | NBio- CO2       | Total CO2       | CH4                | N2O           | CO2e            |
|--------------|---------------|---------------|---------------|--------------------|---------------|--------------------|---------------|----------------|--------------------|---------------|----------|-----------------|-----------------|--------------------|---------------|-----------------|
| Category     | 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       | 0.0146        | 0.4851        | 0.1947        | 2.4500e-003        | 0.0897        | 4.0000e-003        | 0.0937        | 0.0258         | 3.8200e-003        | 0.0296        |          | 260.0231        | 260.0231        | 2.5900e-003        | 0.0385        | 271.5479        |
| Worker       | 0.0479        | 0.0328        | 0.4159        | 1.2500e-003        | 0.1565        | 7.3000e-004        | 0.1572        | 0.0415         | 6.7000e-004        | 0.0422        |          | 126.0593        | 126.0593        | 3.2100e-003        | 3.3600e-003   | 127.1411        |
| <b>Total</b> | <b>0.0625</b> | <b>0.5178</b> | <b>0.6106</b> | <b>3.7000e-003</b> | <b>0.2462</b> | <b>4.7300e-003</b> | <b>0.2509</b> | <b>0.0673</b>  | <b>4.4900e-003</b> | <b>0.0718</b> |          | <b>386.0824</b> | <b>386.0824</b> | <b>5.8000e-003</b> | <b>0.0418</b> | <b>398.6890</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

**4.0 Operational Detail - Mobile****4.1 Mitigation Measures Mobile**

|             | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|-------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category    | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000        | 0.0000       | 0.0000     | 0.0000         | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

**4.2 Trip Summary Information**

|                            | Average Daily Trip Rate |          |        | Unmitigated | Mitigated  |
|----------------------------|-------------------------|----------|--------|-------------|------------|
| Land Use                   | Weekday                 | Saturday | Sunday | Annual VMT  | Annual VMT |
| Other Non-Asphalt Surfaces | 0.00                    | 0.00     | 0.00   |             |            |
| Total                      | 0.00                    | 0.00     | 0.00   |             |            |

**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 |
| Other Non-Asphalt Surfaces | 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       |
|----------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Other Non-Asphalt Surfaces | 0.534849 | 0.056022 | 0.172639 | 0.141007 | 0.026597 | 0.007310 | 0.011327 | 0.018693 | 0.000616 | 0.000315 | 0.024057 | 0.001100 | 0.005468 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 5.0 Energy Detail

Historical Energy Use: N

## 5.1 Mitigation Measures Energy

|                        | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|------------------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Category               | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| NaturalGas Mitigated   | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| NaturalGas Unmitigated | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## 5.2 Energy by Land Use - NaturalGas

Unmitigated

|                            | NaturalGas Use | ROG    | NOx    | CO     | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4    | N2O    | CO2e   |
|----------------------------|----------------|--------|--------|--------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-----------|-----------|--------|--------|--------|
| Land Use                   | kBTU/yr        | lb/day |        |        |        |               |              |            |                |               |             | lb/day   |           |           |        |        |        |
| Other Non-Asphalt Surfaces | 0              | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |
| Total                      |                | 0.0000 | 0.0000 | 0.0000 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 0.0000    | 0.0000    | 0.0000 | 0.0000 | 0.0000 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 5.2 Energy by Land Use - NaturalGas

Mitigated

|                            | NaturalGas Use | ROG           | NOx           | CO            | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2     | Total CO2     | CH4           | N2O           | CO2e          |
|----------------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|---------------|---------------|---------------|---------------|---------------|
| Land Use                   | kBTU/yr        | lb/day        |               |               |               |               |               |               |                |               |               | lb/day   |               |               |               |               |               |
| Other Non-Asphalt Surfaces | 0              | 0.0000        | 0.0000        | 0.0000        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 0.0000        | 0.0000        | 0.0000        | 0.0000        | 0.0000        |
| <b>Total</b>               |                | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> | <b>0.0000</b> |

## 6.0 Area Detail

## 6.1 Mitigation Measures Area

|             | ROG    | NOx         | CO          | SO2    | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2   | Total CO2   | CH4    | N2O | CO2e        |
|-------------|--------|-------------|-------------|--------|---------------|--------------|------------|----------------|---------------|-------------|----------|-------------|-------------|--------|-----|-------------|
| Category    | lb/day |             |             |        |               |              |            |                |               |             | lb/day   |             |             |        |     |             |
| Mitigated   | 0.1632 | 1.0000e-005 | 8.9000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.9000e-003 | 1.9000e-003 | 0.0000 |     | 2.0300e-003 |
| Unmitigated | 0.1632 | 1.0000e-005 | 8.9000e-004 | 0.0000 |               | 0.0000       | 0.0000     |                | 0.0000        | 0.0000      |          | 1.9000e-003 | 1.9000e-003 | 0.0000 |     | 2.0300e-003 |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 6.2 Area by SubCategory

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 | 0.0289        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1342        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 8.0000e-005   | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |     | 2.0300e-003        |
| <b>Total</b>          | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> |     | <b>2.0300e-003</b> |

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

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

## 6.2 Area by SubCategory

Mitigated

|                       | ROG           | NOx                | CO                 | SO2           | Fugitive PM10 | Exhaust PM10  | PM10 Total    | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total   | Bio- CO2 | NBio- CO2          | Total CO2          | CH4           | N2O | CO2e               |
|-----------------------|---------------|--------------------|--------------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|----------|--------------------|--------------------|---------------|-----|--------------------|
| SubCategory           | lb/day        |                    |                    |               |               |               |               |                |               |               | lb/day   |                    |                    |               |     |                    |
| Architectural Coating | 0.0289        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Consumer Products     | 0.1342        |                    |                    |               |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          |                    | 0.0000             |               |     | 0.0000             |
| Landscaping           | 8.0000e-005   | 1.0000e-005        | 8.9000e-004        | 0.0000        |               | 0.0000        | 0.0000        |                | 0.0000        | 0.0000        |          | 1.9000e-003        | 1.9000e-003        | 0.0000        |     | 2.0300e-003        |
| <b>Total</b>          | <b>0.1632</b> | <b>1.0000e-005</b> | <b>8.9000e-004</b> | <b>0.0000</b> |               | <b>0.0000</b> | <b>0.0000</b> |                | <b>0.0000</b> | <b>0.0000</b> |          | <b>1.9000e-003</b> | <b>1.9000e-003</b> | <b>0.0000</b> |     | <b>2.0300e-003</b> |

## 7.0 Water Detail

## 7.1 Mitigation Measures Water

## RCCD Solar Plan Project Operations - Max Day - Riverside-South Coast County, Winter

**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied****8.0 Waste Detail**

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**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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

**10.0 Stationary Equipment**

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**Fire Pumps and Emergency Generators**

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

**Boilers**

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

**User Defined Equipment**

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

**11.0 Vegetation**

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