

## **APPENDIX B**

# **AIR QUALITY MODELING**

**This page intentionally left blank**

## **B-1**

### **AIR QUALITY MODELING OUTPUTS**

**This page intentionally left blank**

# Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis Custom Report

## Table of Contents

### 1. Basic Project Information

#### 1.1. Basic Project Information

#### 1.2. Land Use Types

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

### 2. Emissions Summary

#### 2.4. Operations Emissions Compared Against Thresholds

#### 2.5. Operations Emissions by Sector, Unmitigated

### 4. Operations Emissions Details

#### 4.1. Mobile Emissions by Land Use

##### 4.1.1. Unmitigated

#### 4.2. Energy

##### 4.2.1. Electricity Emissions By Land Use - Unmitigated

##### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

#### 4.3. Area Emissions by Source

##### 4.3.1. Unmitigated

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

#### 4.5. Waste Emissions by Land Use

##### 4.5.1. Unmitigated

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

#### 4.7. Offroad Emissions By Equipment Type

##### 4.7.1. Unmitigated

#### 4.8. Stationary Emissions By Equipment Type

##### 4.8.1. Unmitigated

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

## 8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                                                                                         |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|
| Project Name                | Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis |
| Operational Year            | 2024                                                                                                          |
| Lead Agency                 | —                                                                                                             |
| Land Use Scale              | Project/site                                                                                                  |
| Analysis Level for Defaults | County                                                                                                        |
| Windspeed (m/s)             | 2.50                                                                                                          |
| Precipitation (days)        | 0.20                                                                                                          |
| Location                    | 32250 Avenida La Pata, San Juan Capistrano, CA 92675, USA                                                     |
| County                      | Orange                                                                                                        |
| City                        | Unincorporated                                                                                                |
| Air District                | South Coast AQMD                                                                                              |
| Air Basin                   | South Coast                                                                                                   |
| TAZ                         | 6057                                                                                                          |
| EDFZ                        | 12                                                                                                            |
| Electric Utility            | San Diego Gas & Electric                                                                                      |
| Gas Utility                 | Southern California Gas                                                                                       |
| App Version                 | 2022.1.1.22                                                                                                   |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|------------------|------|------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
|------------------|------|------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|

|                            |     |      |     |      |      |   |   |   |
|----------------------------|-----|------|-----|------|------|---|---|---|
| Other Non-Asphalt Surfaces | 680 | Acre | 680 | 0.00 | 0.00 | — | — | — |
|----------------------------|-----|------|-----|------|------|---|---|---|

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | CO2e   |
|---------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 9.94 | 78.3 | 208  | 0.43 | 3.00  | 0.61  | 3.61  | 2.73   | 0.15   | 2.89   | 0.00 | 42,150 | 42,150 | 1.70 | 0.35 | 42,300 |
| Daily, Winter (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 9.93 | 78.3 | 207  | 0.43 | 3.00  | 0.61  | 3.61  | 2.73   | 0.15   | 2.89   | 0.00 | 42,120 | 42,120 | 1.70 | 0.35 | 42,268 |
| Average Daily (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 9.11 | 65.9 | 175  | 0.36 | 2.53  | 0.61  | 3.13  | 2.30   | 0.15   | 2.45   | 0.00 | 35,526 | 35,526 | 1.44 | 0.30 | 35,652 |
| Annual (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 1.66 | 12.0 | 31.9 | 0.07 | 0.46  | 0.11  | 0.57  | 0.42   | 0.03   | 0.45   | 0.00 | 5,882  | 5,882  | 0.24 | 0.05 | 5,903  |

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|--------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
|--------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|

|                     |      |      |      |      |         |      |      |         |      |      |      |        |        |      |      |        |
|---------------------|------|------|------|------|---------|------|------|---------|------|------|------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 602    | 602    | 0.02 | 0.01 | 610    |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 5.16 | 78.1 | 205  | 0.42 | 3.00    | —    | 3.00 | 2.73    | —    | 2.73 | —    | 41,547 | 41,547 | 1.69 | 0.34 | 41,690 |
| Total               | 9.94 | 78.3 | 208  | 0.43 | 3.00    | 0.61 | 3.61 | 2.73    | 0.15 | 2.89 | 0.00 | 42,150 | 42,150 | 1.70 | 0.35 | 42,300 |
| Daily, Winter (Max) | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 573    | 573    | 0.02 | 0.02 | 578    |
| Area                | 4.59 | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 5.16 | 78.1 | 205  | 0.42 | 3.00    | —    | 3.00 | 2.73    | —    | 2.73 | —    | 41,547 | 41,547 | 1.69 | 0.34 | 41,690 |
| Total               | 9.93 | 78.3 | 207  | 0.43 | 3.00    | 0.61 | 3.61 | 2.73    | 0.15 | 2.89 | 0.00 | 42,120 | 42,120 | 1.70 | 0.35 | 42,268 |
| Average Daily       | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.17 | 2.27 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 581    | 581    | 0.02 | 0.02 | 587    |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 4.34 | 65.7 | 173  | 0.36 | 2.52    | —    | 2.52 | 2.30    | —    | 2.30 | —    | 34,945 | 34,945 | 1.42 | 0.28 | 35,065 |
| Total               | 9.11 | 65.9 | 175  | 0.36 | 2.53    | 0.61 | 3.13 | 2.30    | 0.15 | 2.45 | 0.00 | 35,526 | 35,526 | 1.44 | 0.30 | 35,652 |

|          |      |      |      |         |         |      |      |         |      |      |      |       |       |         |         |       |
|----------|------|------|------|---------|---------|------|------|---------|------|------|------|-------|-------|---------|---------|-------|
| Annual   | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | —    | —     | —     | —       | —       | —     |
| Mobile   | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | —    | 96.2  | 96.2  | < 0.005 | < 0.005 | 97.2  |
| Area     | 0.84 | 0.00 | 0.00 | 0.00    | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Energy   | 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  |
| Water    | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Waste    | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Off-Road | 0.79 | 12.0 | 31.5 | 0.06    | 0.46    | —    | 0.46 | 0.42    | —    | 0.42 | —    | 5,786 | 5,786 | 0.23    | 0.05    | 5,805 |
| Total    | 1.66 | 12.0 | 31.9 | 0.07    | 0.46    | 0.11 | 0.57 | 0.42    | 0.03 | 0.45 | 0.00 | 5,882 | 5,882 | 0.24    | 0.05    | 5,903 |

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG  | NOx  | CO   | SO2  | PM10E   | PM10D | PM10T | PM2.5E  | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|------|------|------|------|---------|-------|-------|---------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —       | —     | —     | —       | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 602   | 602  | 0.02 | 0.01 | 610  |
| Total                      | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 602   | 602  | 0.02 | 0.01 | 610  |
| Daily, Winter (Max)        | —    | —    | —    | —    | —       | —     | —     | —       | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 573   | 573  | 0.02 | 0.02 | 578  |
| Total                      | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 573   | 573  | 0.02 | 0.02 | 578  |

|                            |      |      |      |         |         |      |      |         |      |      |   |      |      |         |         |      |
|----------------------------|------|------|------|---------|---------|------|------|---------|------|------|---|------|------|---------|---------|------|
| Annual                     | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | — | —    | —    | —       | —       | —    |
| Other Non-Asphalt Surfaces | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 96.2 | 96.2 | < 0.005 | < 0.005 | 97.2 |
| Total                      | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 96.2 | 96.2 | < 0.005 | < 0.005 | 97.2 |

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Daily, Winter (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Annual                     | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |

## 4.3. Area Emissions by Source

## 4.3.1. Unmitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source              | ROG  | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|------|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —    | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Consumer Products   | 2.33 | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                             |      |      |      |      |      |   |      |      |   |      |   |      |      |      |      |      |
|-----------------------------|------|------|------|------|------|---|------|------|---|------|---|------|------|------|------|------|
| Architectu<br>Coatings      | 2.26 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Landscap<br>e Equipmen<br>t | 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 |
| Total                       | 4.59 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily,<br>Winter<br>(Max)   | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consumer<br>Products        | 2.33 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architectu<br>ral Coatings  | 2.26 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Total                       | 4.59 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Annual                      | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consumer<br>Products        | 0.43 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architectu<br>ral Coatings  | 0.41 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Landscap<br>e Equipmen<br>t | 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 |
| Total                       | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

|          |     |     |    |     |       |       |       |        |        |        |      |       |      |     |     |      |
|----------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|----------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|

|                            |   |   |   |   |   |   |   |   |   |   |      |      |      |      |      |      |
|----------------------------|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|
| Daily, Summer (Max)        | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

|                            |   |   |   |   |   |   |   |   |   |   |      |      |      |      |      |      |
|----------------------------|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|
| Daily, Winter (Max)        | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type                    | ROG  | NOx  | CO   | SO2     | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2  | CO2T   | CH4  | N2O     | CO2e   |
|-----------------------------------|------|------|------|---------|-------|-------|-------|--------|--------|--------|------|--------|--------|------|---------|--------|
| Daily, Summer (Max)               | —    | —    | —    | —       | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.95 | 6.49 | 49.4 | 0.09    | 0.18  | —     | 0.18  | 0.18   | —      | 0.18   | —    | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |
| Rubber Tired Dozers               | 0.31 | 1.62 | 16.2 | 0.03    | 0.06  | —     | 0.06  | 0.06   | —      | 0.06   | —    | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate Compactors                  | 0.55 | 2.87 | 28.7 | 0.10    | 0.11  | —     | 0.11  | 0.11   | —      | 0.11   | —    | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                          | 2.24 | 57.7 | 64.6 | 0.12    | 2.24  | —     | 2.24  | 1.99   | —      | 1.99   | —    | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                           | 0.11 | 0.59 | 5.95 | 0.01    | 0.02  | —     | 0.02  | 0.02   | —      | 0.02   | —    | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other Material Handling Equipment | 0.31 | 4.70 | 5.22 | 0.01    | 0.22  | —     | 0.22  | 0.20   | —      | 0.20   | —    | 851    | 851    | 0.03 | 0.01    | 854    |
| Skid Steer Loaders                | 0.03 | 0.77 | 1.04 | < 0.005 | 0.03  | —     | 0.03  | 0.03   | —      | 0.03   | —    | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber Tired Loaders              | 0.19 | 1.00 | 9.95 | 0.02    | 0.04  | —     | 0.04  | 0.04   | —      | 0.04   | —    | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highway Trucks                | 0.46 | 2.42 | 24.2 | 0.05    | 0.09  | —     | 0.09  | 0.09   | —      | 0.09   | —    | 4,908  | 4,908  | 0.20 | 0.04    | 4,925  |
| Total                             | 5.16 | 78.1 | 205  | 0.42    | 3.00  | —     | 3.00  | 2.73   | —      | 2.73   | —    | 41,547 | 41,547 | 1.69 | 0.34    | 41,690 |
| Daily, Winter (Max)               | —    | —    | —    | —       | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —       | —      |

|                                            |      |      |      |         |         |   |         |         |   |         |   |        |        |      |         |        |
|--------------------------------------------|------|------|------|---------|---------|---|---------|---------|---|---------|---|--------|--------|------|---------|--------|
| Tractors/L                                 | 0.95 | 6.49 | 49.4 | 0.09    | 0.18    | — | 0.18    | 0.18    | — | 0.18    | — | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |
| Rubber<br>Tired<br>Dozers                  | 0.31 | 1.62 | 16.2 | 0.03    | 0.06    | — | 0.06    | 0.06    | — | 0.06    | — | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate<br>Compactors                        | 0.55 | 2.87 | 28.7 | 0.10    | 0.11    | — | 0.11    | 0.11    | — | 0.11    | — | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                                   | 2.24 | 57.7 | 64.6 | 0.12    | 2.24    | — | 2.24    | 1.99    | — | 1.99    | — | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                                    | 0.11 | 0.59 | 5.95 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other<br>Material<br>Handling<br>Equipment | 0.31 | 4.70 | 5.22 | 0.01    | 0.22    | — | 0.22    | 0.20    | — | 0.20    | — | 851    | 851    | 0.03 | 0.01    | 854    |
| Skid Steer<br>Loaders                      | 0.03 | 0.77 | 1.04 | < 0.005 | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber<br>Tired<br>Loaders                 | 0.19 | 1.00 | 9.95 | 0.02    | 0.04    | — | 0.04    | 0.04    | — | 0.04    | — | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highw<br>ay<br>Trucks                  | 0.46 | 2.42 | 24.2 | 0.05    | 0.09    | — | 0.09    | 0.09    | — | 0.09    | — | 4,908  | 4,908  | 0.20 | 0.04    | 4,925  |
| Total                                      | 5.16 | 78.1 | 205  | 0.42    | 3.00    | — | 3.00    | 2.73    | — | 2.73    | — | 41,547 | 41,547 | 1.69 | 0.34    | 41,690 |
| Annual                                     | —    | —    | —    | —       | —       | — | —       | —       | — | —       | — | —      | —      | —    | —       | —      |
| Tractors/L<br>oaders/Ba<br>ckhoes          | 0.15 | 1.00 | 7.58 | 0.01    | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 1,349  | 1,349  | 0.05 | 0.01    | 1,354  |
| Rubber<br>Tired<br>Dozers                  | 0.05 | 0.25 | 2.49 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 463    | 463    | 0.02 | < 0.005 | 464    |
| Plate<br>Compactors                        | 0.08 | 0.44 | 4.40 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 873    | 873    | 0.04 | 0.01    | 876    |
| Scrapers                                   | 0.34 | 8.85 | 9.92 | 0.02    | 0.34    | — | 0.34    | 0.31    | — | 0.31    | — | 1,829  | 1,829  | 0.07 | 0.01    | 1,835  |
| Graders                                    | 0.02 | 0.09 | 0.91 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 168    | 168    | 0.01 | < 0.005 | 169    |

|                                   |         |      |      |         |         |   |         |         |   |         |   |       |       |         |         |       |
|-----------------------------------|---------|------|------|---------|---------|---|---------|---------|---|---------|---|-------|-------|---------|---------|-------|
| Other Material Handling Equipment | 0.05    | 0.72 | 0.80 | < 0.005 | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 119   | 119   | < 0.005 | < 0.005 | 119   |
| Skid Steer Loaders                | < 0.005 | 0.12 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 20.7  | 20.7  | < 0.005 | < 0.005 | 20.8  |
| Rubber Tired Loaders              | 0.03    | 0.15 | 1.53 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 280   | 280   | 0.01    | < 0.005 | 281   |
| Off-Highway Trucks                | 0.07    | 0.37 | 3.71 | 0.01    | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 683   | 683   | 0.03    | 0.01    | 686   |
| Total                             | 0.79    | 12.0 | 31.5 | 0.06    | 0.46    | — | 0.46    | 0.42    | — | 0.42    | — | 5,786 | 5,786 | 0.23    | 0.05    | 5,805 |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Avoided             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Sequestered         | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Removed             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily,<br>Winter<br>(Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequester<br>ed           | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual                    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequester<br>ed           | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

|               |               |                |              |            |             |              |            |          |
|---------------|---------------|----------------|--------------|------------|-------------|--------------|------------|----------|
| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---------------|---------------|----------------|--------------|------------|-------------|--------------|------------|----------|

|                            |      |      |      |        |     |     |     |         |
|----------------------------|------|------|------|--------|-----|-----|-----|---------|
| Other Non-Asphalt Surfaces | 70.0 | 70.0 | 70.0 | 25,565 | 868 | 868 | 868 | 316,746 |
|----------------------------|------|------|------|--------|-----|-----|-----|---------|

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 0                                        | 0.00                                     | 0.00                                         | 0.00                                         | 1,777,248                   |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 250   |

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use                   | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|----------------------------|----------------------|-----|--------|--------|-----------------------|
| Other Non-Asphalt Surfaces | 0.00                 | 589 | 0.0330 | 0.0040 | 0.00                  |

5.12. Operational Water and Wastewater Consumption

## 5.12.1. Unmitigated

| Land Use                   | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|----------------------------|-------------------------|--------------------------|
| Other Non-Asphalt Surfaces | 0.00                    | 0.00                     |

## 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

| Land Use                   | Waste (ton/year) | Cogeneration (kWh/year) |
|----------------------------|------------------|-------------------------|
| Other Non-Asphalt Surfaces | 0.00             | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

## 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|

## 5.15. Operational Off-Road Equipment

## 5.15.1. Unmitigated

| Equipment Type            | Fuel Type | Engine Tier    | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---------------------------|-----------|----------------|----------------|---------------|------------|-------------|
| Tractors/Loaders/Backhoes | Diesel    | Tier 4 Final   | 4.00           | 10.0          | 460        | 0.37        |
| Tractors/Loaders/Backhoes | Diesel    | Tier 4 Final   | 1.00           | 10.0          | 251        | 0.37        |
| Tractors/Loaders/Backhoes | Diesel    | Tier 4 Interim | 1.00           | 10.0          | 110        | 0.37        |
| Rubber Tired Dozers       | Diesel    | Tier 4 Final   | 2.00           | 10.0          | 354        | 0.40        |
| Plate Compactors          | Diesel    | Tier 4 Final   | 2.00           | 10.0          | 582        | 0.43        |
| Scrapers                  | Diesel    | Tier 3         | 3.00           | 10.0          | 500        | 0.48        |
| Scrapers                  | Diesel    | Tier 3         | 3.00           | 10.0          | 283        | 0.48        |

|                                   |        |                |      |      |      |      |
|-----------------------------------|--------|----------------|------|------|------|------|
| Graders                           | Diesel | Tier 4 Final   | 1.00 | 10.0 | 253  | 0.41 |
| Tractors/Loaders/Backhoes         | Diesel | Tier 4 Final   | 1.00 | 5.00 | 115  | 0.37 |
| Other Material Handling Equipment | Diesel | Tier 3         | 1.00 | 5.00 | 180  | 0.42 |
| Skid Steer Loaders                | Diesel | Tier 4 Interim | 1.00 | 5.00 | 69.0 | 0.37 |
| Rubber Tired Loaders              | Diesel | Tier 4 Final   | 1.00 | 10.0 | 182  | 0.36 |
| Rubber Tired Loaders              | Diesel | Tier 4 Final   | 1.00 | 10.0 | 300  | 0.36 |
| Off-Highway Trucks                | Diesel | Tier 4 Final   | 3.00 | 10.0 | 370  | 0.38 |
| Other Material Handling Equipment | Diesel | Tier 4 Final   | 1.00 | 5.00 | 73.7 | 0.42 |
| Other Material Handling Equipment | Diesel | Average        | 2.00 | 5.00 | 50.0 | 0.40 |

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

8. User Changes to Default Data

| Screen                         | Justification                                                                                                                                                                                                |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operations: Vehicle Data       | The proposed project would generate approximately 3,041 net new average daily trips, including 2,371 truck trips and 70 passenger vehicle trips. This analysis only includes the 70 passenger vehicle trips. |
| Operations: Fleet Mix          | The 70 passenger trips are associated with employee trips only, therefore, this analysis assumes 50% LDA, 25% LDT1, and 25% LDT2.                                                                            |
| Operations: Off-Road Equipment | Equipment list, including HP and engine tier, was provided by OC Waste & Recycling.                                                                                                                          |
| Operations: Road Dust          | —                                                                                                                                                                                                            |

# Increase in Maximum Daily Operations at Prima Deshecha Landfill - Truck Trips Analysis Custom Report

## Table of Contents

### 1. Basic Project Information

#### 1.1. Basic Project Information

#### 1.2. Land Use Types

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

### 2. Emissions Summary

#### 2.4. Operations Emissions Compared Against Thresholds

#### 2.5. Operations Emissions by Sector, Unmitigated

### 4. Operations Emissions Details

#### 4.1. Mobile Emissions by Land Use

##### 4.1.1. Unmitigated

#### 4.2. Energy

##### 4.2.1. Electricity Emissions By Land Use - Unmitigated

##### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

#### 4.3. Area Emissions by Source

##### 4.3.1. Unmitigated

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

#### 4.5. Waste Emissions by Land Use

##### 4.5.1. Unmitigated

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

#### 4.7. Offroad Emissions By Equipment Type

##### 4.7.1. Unmitigated

#### 4.8. Stationary Emissions By Equipment Type

##### 4.8.1. Unmitigated

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

## 8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                                                                  |
|-----------------------------|----------------------------------------------------------------------------------------|
| Project Name                | Increase in Maximum Daily Operations at Prima Deshecha Landfill - Truck Trips Analysis |
| Operational Year            | 2024                                                                                   |
| Lead Agency                 | —                                                                                      |
| Land Use Scale              | Project/site                                                                           |
| Analysis Level for Defaults | County                                                                                 |
| Windspeed (m/s)             | 2.50                                                                                   |
| Precipitation (days)        | 0.20                                                                                   |
| Location                    | 32250 Avenida La Pata, San Juan Capistrano, CA 92675, USA                              |
| County                      | Orange                                                                                 |
| City                        | Unincorporated                                                                         |
| Air District                | South Coast AQMD                                                                       |
| Air Basin                   | South Coast                                                                            |
| TAZ                         | 6057                                                                                   |
| EDFZ                        | 12                                                                                     |
| Electric Utility            | San Diego Gas & Electric                                                               |
| Gas Utility                 | Southern California Gas                                                                |
| App Version                 | 2022.1.1.22                                                                            |

## 1.2. Land Use Types

| Land Use Subtype           | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|----------------------------|------|------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
| Other Non-Asphalt Surfaces | 680  | Acre | 680         | 0.00                  | 0.00                   | —                              | —          | —           |

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | CO2e    |
|---------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|---------|---------|------|------|---------|
| Daily, Summer (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Unmit.              | 16.6 | 579  | 424  | 4.22 | 10.0  | 109   | 119   | 9.40   | 29.4   | 38.8   | 0.00 | 462,614 | 462,614 | 33.6 | 67.0 | 484,293 |
| Daily, Winter (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Unmit.              | 16.4 | 598  | 425  | 4.22 | 10.0  | 109   | 119   | 9.41   | 29.4   | 38.8   | 0.00 | 462,678 | 462,678 | 33.6 | 67.0 | 483,503 |
| Average Daily (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Unmit.              | 14.7 | 516  | 360  | 3.61 | 8.53  | 93.5  | 102   | 8.00   | 25.2   | 33.2   | 0.00 | 395,762 | 395,762 | 28.8 | 57.4 | 413,914 |
| Annual (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Unmit.              | 2.69 | 94.2 | 65.7 | 0.66 | 1.56  | 17.1  | 18.6  | 1.46   | 4.60   | 6.06   | 0.00 | 65,523  | 65,523  | 4.77 | 9.50 | 68,528  |

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector              | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Truck Trips Analysis Custom Report, 3/13/2024

|                     |      |      |      |      |      |      |      |      |      |      |      |         |         |      |      |         |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|---------|---------|------|------|---------|
| Mobile              | 5.98 | 482  | 197  | 3.75 | 6.20 | 109  | 115  | 5.93 | 29.4 | 35.3 | —    | 416,829 | 416,829 | 31.8 | 66.6 | 438,351 |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00 | —    | 0.00 | 0.00 | —    | 0.00 | —    | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Energy              | 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    |
| Water               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Waste               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Off-Road            | 6.05 | 97.6 | 227  | 0.46 | 3.83 | —    | 3.83 | 3.47 | —    | 3.47 | —    | 45,785  | 45,785  | 1.86 | 0.37 | 45,942  |
| Total               | 16.6 | 579  | 424  | 4.22 | 10.0 | 109  | 119  | 9.40 | 29.4 | 38.8 | 0.00 | 462,614 | 462,614 | 33.6 | 67.0 | 484,293 |
| Daily, Winter (Max) | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —       | —       | —    | —    | —       |
| Mobile              | 5.77 | 500  | 198  | 3.75 | 6.21 | 109  | 115  | 5.94 | 29.4 | 35.3 | —    | 416,893 | 416,893 | 31.8 | 66.6 | 437,561 |
| Area                | 4.59 | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —       | —       | —    | —    | —       |
| Energy              | 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    |
| Water               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Waste               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Off-Road            | 6.05 | 97.6 | 227  | 0.46 | 3.83 | —    | 3.83 | 3.47 | —    | 3.47 | —    | 45,785  | 45,785  | 1.86 | 0.37 | 45,942  |
| Total               | 16.4 | 598  | 425  | 4.22 | 10.0 | 109  | 119  | 9.41 | 29.4 | 38.8 | 0.00 | 462,678 | 462,678 | 33.6 | 67.0 | 483,503 |
| Average Daily       | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —       | —       | —    | —    | —       |
| Mobile              | 5.05 | 434  | 169  | 3.22 | 5.32 | 93.5 | 98.8 | 5.09 | 25.2 | 30.3 | —    | 357,305 | 357,305 | 27.2 | 57.1 | 375,325 |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00 | —    | 0.00 | 0.00 | —    | 0.00 | —    | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Energy              | 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    |
| Water               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Waste               | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |
| Off-Road            | 5.08 | 81.9 | 191  | 0.39 | 3.21 | —    | 3.21 | 2.91 | —    | 2.91 | —    | 38,457  | 38,457  | 1.56 | 0.31 | 38,589  |
| Total               | 14.7 | 516  | 360  | 3.61 | 8.53 | 93.5 | 102  | 8.00 | 25.2 | 33.2 | 0.00 | 395,762 | 395,762 | 28.8 | 57.4 | 413,914 |
| Annual              | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —       | —       | —    | —    | —       |
| Mobile              | 0.92 | 79.3 | 30.9 | 0.59 | 0.97 | 17.1 | 18.0 | 0.93 | 4.60 | 5.53 | —    | 59,156  | 59,156  | 4.51 | 9.45 | 62,139  |
| Area                | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | —    | 0.00 | 0.00 | —    | 0.00 | —    | 0.00    | 0.00    | 0.00 | 0.00 | 0.00    |

|          |      |      |      |      |      |      |      |      |      |      |      |        |        |      |      |        |
|----------|------|------|------|------|------|------|------|------|------|------|------|--------|--------|------|------|--------|
| Energy   | 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   |
| Water    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste    | —    | —    | —    | —    | —    | —    | —    | —    | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road | 0.93 | 14.9 | 34.8 | 0.07 | 0.59 | —    | 0.59 | 0.53 | —    | 0.53 | —    | 6,367  | 6,367  | 0.26 | 0.05 | 6,389  |
| Total    | 2.69 | 94.2 | 65.7 | 0.66 | 1.56 | 17.1 | 18.6 | 1.46 | 4.60 | 6.06 | 0.00 | 65,523 | 65,523 | 4.77 | 9.50 | 68,528 |

## 4. Operations Emissions Details

### 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2   | CO2T    | CH4  | N2O  | CO2e    |
|----------------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|---------|---------|------|------|---------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Other Non-Asphalt Surfaces | 5.98 | 482  | 197  | 3.75 | 6.20  | 109   | 115   | 5.93   | 29.4   | 35.3   | —    | 416,829 | 416,829 | 31.8 | 66.6 | 438,351 |
| Total                      | 5.98 | 482  | 197  | 3.75 | 6.20  | 109   | 115   | 5.93   | 29.4   | 35.3   | —    | 416,829 | 416,829 | 31.8 | 66.6 | 438,351 |
| Daily, Winter (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Other Non-Asphalt Surfaces | 5.77 | 500  | 198  | 3.75 | 6.21  | 109   | 115   | 5.94   | 29.4   | 35.3   | —    | 416,893 | 416,893 | 31.8 | 66.6 | 437,561 |
| Total                      | 5.77 | 500  | 198  | 3.75 | 6.21  | 109   | 115   | 5.94   | 29.4   | 35.3   | —    | 416,893 | 416,893 | 31.8 | 66.6 | 437,561 |
| Annual                     | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —       | —       | —    | —    | —       |
| Other Non-Asphalt Surfaces | 0.92 | 79.3 | 30.9 | 0.59 | 0.97  | 17.1  | 18.0  | 0.93   | 4.60   | 5.53   | —    | 59,156  | 59,156  | 4.51 | 9.45 | 62,139  |

|       |      |      |      |      |      |      |      |      |      |      |   |        |        |      |      |        |
|-------|------|------|------|------|------|------|------|------|------|------|---|--------|--------|------|------|--------|
| Total | 0.92 | 79.3 | 30.9 | 0.59 | 0.97 | 17.1 | 18.0 | 0.93 | 4.60 | 5.53 | — | 59,156 | 59,156 | 4.51 | 9.45 | 62,139 |
|-------|------|------|------|------|------|------|------|------|------|------|---|--------|--------|------|------|--------|

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|----------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
|----------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|

|                            |      |      |      |      |      |   |      |      |   |      |   |      |      |      |      |      |
|----------------------------|------|------|------|------|------|---|------|------|---|------|---|------|------|------|------|------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Daily, Winter (Max)        | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Annual                     | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source                  | ROG  | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|-------------------------|------|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max)     | —    | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Consumer Products       | 2.33 | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Architectu ral Coatings | 2.26 | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                         |      |      |      |      |      |   |      |      |   |      |   |      |      |      |      |      |
|-------------------------|------|------|------|------|------|---|------|------|---|------|---|------|------|------|------|------|
| Landscap Equipment      | 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 |
| Total                   | 4.59 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)     | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consumer Products       | 2.33 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architectu ral Coatings | 2.26 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Total                   | 4.59 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Annual                  | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consumer Products       | 0.43 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architectu ral Coatings | 0.41 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Landscap e Equipmen t   | 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 |
| Total                   | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                            |   |   |   |   |   |   |   |   |   |   |      |      |      |      |      |      |
|----------------------------|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |

|                                  |   |   |   |   |   |   |   |   |   |   |      |      |      |      |      |      |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|
| Other<br>Non-Asphalt<br>Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                            | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                           | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other<br>Non-Asphalt<br>Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                            | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                  | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily,<br>Summer<br>(Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily,<br>Winter<br>(Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual                    | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

# Increase in Maximum Daily Operations at Prima Deshecha Landfill - Truck Trips Analysis Custom Report, 3/13/2024

| Equipment Type                    | ROG  | NOx  | CO   | SO2     | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2  | CO2T   | CH4  | N2O     | CO2e   |
|-----------------------------------|------|------|------|---------|-------|-------|-------|--------|--------|--------|------|--------|--------|------|---------|--------|
| Daily, Summer (Max)               | —    | —    | —    | —       | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.95 | 6.49 | 49.4 | 0.09    | 0.18  | —     | 0.18  | 0.18   | —      | 0.18   | —    | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |
| Rubber Tired Dozers               | 0.31 | 1.62 | 16.2 | 0.03    | 0.06  | —     | 0.06  | 0.06   | —      | 0.06   | —    | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate Compactors                  | 0.55 | 2.87 | 28.7 | 0.10    | 0.11  | —     | 0.11  | 0.11   | —      | 0.11   | —    | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                          | 2.24 | 57.7 | 64.6 | 0.12    | 2.24  | —     | 2.24  | 1.99   | —      | 1.99   | —    | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                           | 0.11 | 0.59 | 5.95 | 0.01    | 0.02  | —     | 0.02  | 0.02   | —      | 0.02   | —    | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other Material Handling Equipment | 0.52 | 6.53 | 7.01 | 0.01    | 0.37  | —     | 0.37  | 0.33   | —      | 0.33   | —    | 1,083  | 1,083  | 0.04 | 0.01    | 1,087  |
| Skid Steer Loaders                | 0.03 | 0.77 | 1.04 | < 0.005 | 0.03  | —     | 0.03  | 0.03   | —      | 0.03   | —    | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber Tired Loaders              | 0.19 | 1.00 | 9.95 | 0.02    | 0.04  | —     | 0.04  | 0.04   | —      | 0.04   | —    | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highway Trucks                | 1.15 | 20.0 | 43.9 | 0.08    | 0.78  | —     | 0.78  | 0.70   | —      | 0.70   | —    | 8,913  | 8,913  | 0.36 | 0.07    | 8,944  |
| Total                             | 6.05 | 97.6 | 227  | 0.46    | 3.83  | —     | 3.83  | 3.47   | —      | 3.47   | —    | 45,785 | 45,785 | 1.86 | 0.37    | 45,942 |
| Daily, Winter (Max)               | —    | —    | —    | —       | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.95 | 6.49 | 49.4 | 0.09    | 0.18  | —     | 0.18  | 0.18   | —      | 0.18   | —    | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Truck Trips Analysis Custom Report, 3/13/2024

|                                   |      |      |      |         |         |   |         |         |   |         |   |        |        |      |         |        |
|-----------------------------------|------|------|------|---------|---------|---|---------|---------|---|---------|---|--------|--------|------|---------|--------|
| Rubber Tired Dozers               | 0.31 | 1.62 | 16.2 | 0.03    | 0.06    | — | 0.06    | 0.06    | — | 0.06    | — | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate Compactors                  | 0.55 | 2.87 | 28.7 | 0.10    | 0.11    | — | 0.11    | 0.11    | — | 0.11    | — | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                          | 2.24 | 57.7 | 64.6 | 0.12    | 2.24    | — | 2.24    | 1.99    | — | 1.99    | — | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                           | 0.11 | 0.59 | 5.95 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other Material Handling Equipment | 0.52 | 6.53 | 7.01 | 0.01    | 0.37    | — | 0.37    | 0.33    | — | 0.33    | — | 1,083  | 1,083  | 0.04 | 0.01    | 1,087  |
| Skid Steer Loaders                | 0.03 | 0.77 | 1.04 | < 0.005 | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber Tired Loaders              | 0.19 | 1.00 | 9.95 | 0.02    | 0.04    | — | 0.04    | 0.04    | — | 0.04    | — | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highway Trucks                | 1.15 | 20.0 | 43.9 | 0.08    | 0.78    | — | 0.78    | 0.70    | — | 0.70    | — | 8,913  | 8,913  | 0.36 | 0.07    | 8,944  |
| Total                             | 6.05 | 97.6 | 227  | 0.46    | 3.83    | — | 3.83    | 3.47    | — | 3.47    | — | 45,785 | 45,785 | 1.86 | 0.37    | 45,942 |
| Annual                            | —    | —    | —    | —       | —       | — | —       | —       | — | —       | — | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.15 | 1.00 | 7.58 | 0.01    | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 1,349  | 1,349  | 0.05 | 0.01    | 1,354  |
| Rubber Tired Dozers               | 0.05 | 0.25 | 2.49 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 463    | 463    | 0.02 | < 0.005 | 464    |
| Plate Compactors                  | 0.08 | 0.44 | 4.40 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 873    | 873    | 0.04 | 0.01    | 876    |
| Scrapers                          | 0.34 | 8.82 | 9.88 | 0.02    | 0.34    | — | 0.34    | 0.30    | — | 0.30    | — | 1,821  | 1,821  | 0.07 | 0.01    | 1,828  |
| Graders                           | 0.02 | 0.09 | 0.91 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 167    | 167    | 0.01 | < 0.005 | 168    |
| Other Material Handling Equipment | 0.08 | 1.00 | 1.08 | < 0.005 | 0.06    | — | 0.06    | 0.05    | — | 0.05    | — | 151    | 151    | 0.01 | < 0.005 | 151    |

|                      |         |      |      |         |         |   |         |         |   |         |   |       |       |         |         |       |
|----------------------|---------|------|------|---------|---------|---|---------|---------|---|---------|---|-------|-------|---------|---------|-------|
| Skid Steer Loaders   | < 0.005 | 0.12 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 20.7  | 20.7  | < 0.005 | < 0.005 | 20.8  |
| Rubber Tired Loaders | 0.03    | 0.15 | 1.53 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 280   | 280   | 0.01    | < 0.005 | 281   |
| Off-Highway Trucks   | 0.18    | 3.07 | 6.74 | 0.01    | 0.12    | — | 0.12    | 0.11    | — | 0.11    | — | 1,241 | 1,241 | 0.05    | 0.01    | 1,245 |
| Total                | 0.93    | 14.9 | 34.8 | 0.07    | 0.59    | — | 0.59    | 0.53    | — | 0.53    | — | 6,367 | 6,367 | 0.26    | 0.05    | 6,389 |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipmen Type       | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation          | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Avoided             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Sequestered         | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Removed             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| —                   | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Avoided             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|              |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequester    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —            | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual       | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequester ed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed      | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal     | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —            | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

| Land Use Type              | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year   |
|----------------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|------------|
| Other Non-Asphalt Surfaces | 2,972         | 2,972          | 0.00         | 929,686    | 118,864     | 118,864      | 0.00       | 37,187,451 |

5.10. Operational Area Sources

5.10.1. Hearths

## 5.10.1.1. Unmitigated

## 5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 0                                        | 0.00                                     | 0.00                                         | 0.00                                         | 1,777,248                   |

## 5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 250   |

## 5.11. Operational Energy Consumption

## 5.11.1. Unmitigated

## Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use                   | Electricity (kWh/yr) | CO2 | CH4    | N2O    | Natural Gas (kBTU/yr) |
|----------------------------|----------------------|-----|--------|--------|-----------------------|
| Other Non-Asphalt Surfaces | 0.00                 | 589 | 0.0330 | 0.0040 | 0.00                  |

## 5.12. Operational Water and Wastewater Consumption

## 5.12.1. Unmitigated

| Land Use                   | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|----------------------------|-------------------------|--------------------------|
| Other Non-Asphalt Surfaces | 0.00                    | 0.00                     |

## 5.13. Operational Waste Generation

## 5.13.1. Unmitigated

| Land Use                   | Waste (ton/year) | Cogeneration (kWh/year) |
|----------------------------|------------------|-------------------------|
| Other Non-Asphalt Surfaces | 0.00             | —                       |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

## 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|

## 5.15. Operational Off-Road Equipment

## 5.15.1. Unmitigated

| Equipment Type                    | Fuel Type | Engine Tier    | Number per Day | Hours Per Day | Horsepower | Load Factor |
|-----------------------------------|-----------|----------------|----------------|---------------|------------|-------------|
| Tractors/Loaders/Backhoes         | Diesel    | Tier 4 Final   | 4.00           | 10.0          | 460        | 0.37        |
| Tractors/Loaders/Backhoes         | Diesel    | Tier 4 Final   | 1.00           | 10.0          | 251        | 0.37        |
| Tractors/Loaders/Backhoes         | Diesel    | Tier 4 Interim | 1.00           | 10.0          | 110        | 0.37        |
| Rubber Tired Dozers               | Diesel    | Tier 4 Final   | 2.00           | 10.0          | 354        | 0.40        |
| Plate Compactors                  | Diesel    | Tier 4 Final   | 2.00           | 10.0          | 582        | 0.43        |
| Scrapers                          | Diesel    | Tier 3         | 3.00           | 10.0          | 500        | 0.48        |
| Scrapers                          | Diesel    | Tier 3         | 3.00           | 10.0          | 283        | 0.48        |
| Graders                           | Diesel    | Tier 4 Final   | 1.00           | 10.0          | 253        | 0.41        |
| Tractors/Loaders/Backhoes         | Diesel    | Tier 4 Final   | 1.00           | 5.00          | 115        | 0.37        |
| Other Material Handling Equipment | Diesel    | Tier 3         | 1.00           | 5.00          | 180        | 0.42        |
| Skid Steer Loaders                | Diesel    | Tier 4 Interim | 1.00           | 5.00          | 69.0       | 0.37        |
| Rubber Tired Loaders              | Diesel    | Tier 4 Final   | 1.00           | 10.0          | 182        | 0.36        |
| Rubber Tired Loaders              | Diesel    | Tier 4 Final   | 1.00           | 10.0          | 300        | 0.36        |

|                                   |        |              |      |      |      |      |
|-----------------------------------|--------|--------------|------|------|------|------|
| Off-Highway Trucks                | Diesel | Tier 4 Final | 3.00 | 10.0 | 370  | 0.38 |
| Off-Highway Trucks                | Diesel | Tier 3       | 2.00 | 10.0 | 453  | 0.38 |
| Other Material Handling Equipment | Diesel | Tier 4 Final | 1.00 | 5.00 | 73.7 | 0.42 |
| Other Material Handling Equipment | Diesel | Average      | 2.00 | 10.0 | 50.0 | 0.40 |

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

8. User Changes to Default Data

| Screen                         | Justification                                                                                                                                                                                                                                                         |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operations: Vehicle Data       | The proposed project would generate approximately 3,041 net new average daily trips, including 2,371 truck trips and 70 passenger vehicle trips. This analysis only includes the truck trips. The Landfill is closed on Sundays. Also assuming a 40-mile trip length. |
| Operations: Fleet Mix          | Assuming all HHD truck trips.                                                                                                                                                                                                                                         |
| Operations: Off-Road Equipment | Equipment list, including HP and engine tier, was provided by OC Waste & Recycling.                                                                                                                                                                                   |

# Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated Custom Report

## Table of Contents

### 1. Basic Project Information

#### 1.1. Basic Project Information

#### 1.2. Land Use Types

#### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

### 2. Emissions Summary

#### 2.4. Operations Emissions Compared Against Thresholds

#### 2.5. Operations Emissions by Sector, Unmitigated

### 4. Operations Emissions Details

#### 4.1. Mobile Emissions by Land Use

##### 4.1.1. Unmitigated

#### 4.2. Energy

##### 4.2.1. Electricity Emissions By Land Use - Unmitigated

##### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

#### 4.3. Area Emissions by Source

##### 4.3.1. Unmitigated

#### 4.4. Water Emissions by Land Use

##### 4.4.1. Unmitigated

#### 4.5. Waste Emissions by Land Use

##### 4.5.1. Unmitigated

#### 4.6. Refrigerant Emissions by Land Use

##### 4.6.1. Unmitigated

#### 4.7. Offroad Emissions By Equipment Type

##### 4.7.1. Unmitigated

#### 4.8. Stationary Emissions By Equipment Type

##### 4.8.1. Unmitigated

#### 4.9. User Defined Emissions By Equipment Type

##### 4.9.1. Unmitigated

#### 4.10. Soil Carbon Accumulation By Vegetation Type

##### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

##### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

#### 5.15. Operational Off-Road Equipment

##### 5.15.1. Unmitigated

#### 5.16. Stationary Sources

##### 5.16.1. Emergency Generators and Fire Pumps

##### 5.16.2. Process Boilers

#### 5.17. User Defined

#### 5.18. Vegetation

##### 5.18.1. Land Use Change

###### 5.18.1.1. Unmitigated

##### 5.18.1. Biomass Cover Type

###### 5.18.1.1. Unmitigated

##### 5.18.2. Sequestration

###### 5.18.2.1. Unmitigated

#### 8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field                  | Value                                                                                                                     |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Project Name                | Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated |
| Operational Year            | 2024                                                                                                                      |
| Lead Agency                 | —                                                                                                                         |
| Land Use Scale              | Project/site                                                                                                              |
| Analysis Level for Defaults | County                                                                                                                    |
| Windspeed (m/s)             | 2.50                                                                                                                      |
| Precipitation (days)        | 0.20                                                                                                                      |
| Location                    | 32250 Avenida La Pata, San Juan Capistrano, CA 92675, USA                                                                 |
| County                      | Orange                                                                                                                    |
| City                        | Unincorporated                                                                                                            |
| Air District                | South Coast AQMD                                                                                                          |
| Air Basin                   | South Coast                                                                                                               |
| TAZ                         | 6057                                                                                                                      |
| EDFZ                        | 12                                                                                                                        |
| Electric Utility            | San Diego Gas & Electric                                                                                                  |
| Gas Utility                 | Southern California Gas                                                                                                   |
| App Version                 | 2022.1.1.26                                                                                                               |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|------------------|------|------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|
|------------------|------|------|-------------|-----------------------|------------------------|--------------------------------|------------|-------------|

|                            |     |      |     |      |      |   |   |   |
|----------------------------|-----|------|-----|------|------|---|---|---|
| Other Non-Asphalt Surfaces | 680 | Acre | 680 | 0.00 | 0.00 | — | — | — |
|----------------------------|-----|------|-----|------|------|---|---|---|

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit.             | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2  | CO2T   | CH4  | N2O  | CO2e   |
|---------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 8.71 | 23.0 | 208  | 0.43 | 0.78  | 0.61  | 1.39  | 0.78   | 0.15   | 0.94   | 0.00 | 42,150 | 42,150 | 1.70 | 0.35 | 42,300 |
| Daily, Winter (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 8.71 | 23.0 | 207  | 0.43 | 0.78  | 0.61  | 1.39  | 0.78   | 0.15   | 0.94   | 0.00 | 42,120 | 42,120 | 1.70 | 0.35 | 42,268 |
| Average Daily (Max) | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 8.09 | 19.4 | 175  | 0.36 | 0.66  | 0.61  | 1.26  | 0.66   | 0.15   | 0.81   | 0.00 | 35,526 | 35,526 | 1.44 | 0.30 | 35,652 |
| Annual (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —      | —      | —    | —    | —      |
| Unmit.              | 1.48 | 3.54 | 31.9 | 0.07 | 0.12  | 0.11  | 0.23  | 0.12   | 0.03   | 0.15   | 0.00 | 5,882  | 5,882  | 0.24 | 0.05 | 5,903  |

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|--------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
|--------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated Custom Report, 7/19/2024

|                     |      |      |      |      |         |      |      |         |      |      |      |        |        |      |      |        |
|---------------------|------|------|------|------|---------|------|------|---------|------|------|------|--------|--------|------|------|--------|
| Daily, Summer (Max) | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 602    | 602    | 0.02 | 0.01 | 610    |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 3.94 | 22.9 | 205  | 0.42 | 0.78    | —    | 0.78 | 0.78    | —    | 0.78 | —    | 41,547 | 41,547 | 1.69 | 0.34 | 41,690 |
| Total               | 8.71 | 23.0 | 208  | 0.43 | 0.78    | 0.61 | 1.39 | 0.78    | 0.15 | 0.94 | 0.00 | 42,150 | 42,150 | 1.70 | 0.35 | 42,300 |
| Daily, Winter (Max) | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 573    | 573    | 0.02 | 0.02 | 578    |
| Area                | 4.59 | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 3.94 | 22.9 | 205  | 0.42 | 0.78    | —    | 0.78 | 0.78    | —    | 0.78 | —    | 41,547 | 41,547 | 1.69 | 0.34 | 41,690 |
| Total               | 8.71 | 23.0 | 207  | 0.43 | 0.78    | 0.61 | 1.39 | 0.78    | 0.15 | 0.94 | 0.00 | 42,120 | 42,120 | 1.70 | 0.35 | 42,268 |
| Average Daily       | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | —    | —      | —      | —    | —    | —      |
| Mobile              | 0.19 | 0.17 | 2.27 | 0.01 | < 0.005 | 0.61 | 0.61 | < 0.005 | 0.15 | 0.16 | —    | 581    | 581    | 0.02 | 0.02 | 587    |
| Area                | 4.59 | 0.00 | 0.00 | 0.00 | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Energy              | 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   |
| Water               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Waste               | —    | —    | —    | —    | —       | —    | —    | —       | —    | —    | 0.00 | 0.00   | 0.00   | 0.00 | 0.00 | 0.00   |
| Off-Road            | 3.31 | 19.2 | 173  | 0.36 | 0.65    | —    | 0.65 | 0.65    | —    | 0.65 | —    | 34,945 | 34,945 | 1.42 | 0.28 | 35,065 |
| Total               | 8.09 | 19.4 | 175  | 0.36 | 0.66    | 0.61 | 1.26 | 0.66    | 0.15 | 0.81 | 0.00 | 35,526 | 35,526 | 1.44 | 0.30 | 35,652 |

|          |      |      |      |         |         |      |      |         |      |      |      |       |       |         |         |       |
|----------|------|------|------|---------|---------|------|------|---------|------|------|------|-------|-------|---------|---------|-------|
| Annual   | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | —    | —     | —     | —       | —       | —     |
| Mobile   | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | —    | 96.2  | 96.2  | < 0.005 | < 0.005 | 97.2  |
| Area     | 0.84 | 0.00 | 0.00 | 0.00    | 0.00    | —    | 0.00 | 0.00    | —    | 0.00 | —    | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Energy   | 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  |
| Water    | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Waste    | —    | —    | —    | —       | —       | —    | —    | —       | —    | —    | 0.00 | 0.00  | 0.00  | 0.00    | 0.00    | 0.00  |
| Off-Road | 0.60 | 3.51 | 31.5 | 0.06    | 0.12    | —    | 0.12 | 0.12    | —    | 0.12 | —    | 5,786 | 5,786 | 0.23    | 0.05    | 5,805 |
| Total    | 1.48 | 3.54 | 31.9 | 0.07    | 0.12    | 0.11 | 0.23 | 0.12    | 0.03 | 0.15 | 0.00 | 5,882 | 5,882 | 0.24    | 0.05    | 5,903 |

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG  | NOx  | CO   | SO2  | PM10E   | PM10D | PM10T | PM2.5E  | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|------|------|------|------|---------|-------|-------|---------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —       | —     | —     | —       | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 602   | 602  | 0.02 | 0.01 | 610  |
| Total                      | 0.19 | 0.15 | 2.47 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 602   | 602  | 0.02 | 0.01 | 610  |
| Daily, Winter (Max)        | —    | —    | —    | —    | —       | —     | —     | —       | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 573   | 573  | 0.02 | 0.02 | 578  |
| Total                      | 0.19 | 0.16 | 2.18 | 0.01 | < 0.005 | 0.61  | 0.61  | < 0.005 | 0.15   | 0.16   | —    | 573   | 573  | 0.02 | 0.02 | 578  |
| Annual                     | —    | —    | —    | —    | —       | —     | —     | —       | —      | —      | —    | —     | —    | —    | —    | —    |

|                            |      |      |      |         |         |      |      |         |      |      |   |      |      |         |         |      |
|----------------------------|------|------|------|---------|---------|------|------|---------|------|------|---|------|------|---------|---------|------|
| Other Non-Asphalt Surfaces | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 96.2 | 96.2 | < 0.005 | < 0.005 | 97.2 |
| Total                      | 0.03 | 0.03 | 0.41 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 96.2 | 96.2 | < 0.005 | < 0.005 | 97.2 |

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated Custom Report, 7/19/2024

| Land Use                   | ROG  | NOx  | CO   | SO2  | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|------|------|------|------|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Daily, Winter (Max)        | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |
| Annual                     | —    | —    | —    | —    | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | 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 |
| Total                      | 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 |

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source              | ROG  | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|------|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —    | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Consumer Products   | 2.33 | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                         |      |      |      |      |      |   |      |      |   |      |   |      |      |      |      |      |
|-------------------------|------|------|------|------|------|---|------|------|---|------|---|------|------|------|------|------|
| Architect ural          | 2.26 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Landscap e Equipme nt   | 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 |
| Total                   | 4.59 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)     | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consume r Products      | 2.33 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architect ural Coatings | 2.26 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Total                   | 4.59 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Annual                  | —    | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Consume r Products      | 0.43 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Architect ural Coatings | 0.41 | —    | —    | —    | —    | — | —    | —    | — | —    | — | —    | —    | —    | —    | —    |
| Landscap e Equipme nt   | 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 |
| Total                   | 0.84 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use                   | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4  | N2O  | CO2e |
|----------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|------|------|------|
| Daily, Summer (Max)        | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | 0.00 | 0.00  | 0.00 | 0.00 | 0.00 | 0.00 |

|                            |   |   |   |   |   |   |   |   |   |   |      |      |      |      |      |      |
|----------------------------|---|---|---|---|---|---|---|---|---|---|------|------|------|------|------|------|
| Daily, Winter (Max)        | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual                     | — | — | — | — | — | — | — | — | — | — | —    | —    | —    | —    | —    | —    |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total                      | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type                    | ROG  | NOx  | CO   | SO2     | PM10E   | PM10D | PM10T   | PM2.5E  | PM2.5D | PM2.5T  | BCO2 | NBCO2  | CO2T   | CH4  | N2O     | CO2e   |
|-----------------------------------|------|------|------|---------|---------|-------|---------|---------|--------|---------|------|--------|--------|------|---------|--------|
| Daily, Summer (Max)               | —    | —    | —    | —       | —       | —     | —       | —       | —      | —       | —    | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.92 | 4.79 | 49.4 | 0.09    | 0.18    | —     | 0.18    | 0.18    | —      | 0.18    | —    | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |
| Rubber Tired Dozers               | 0.31 | 1.62 | 16.2 | 0.03    | 0.06    | —     | 0.06    | 0.06    | —      | 0.06    | —    | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate Compactors                  | 0.55 | 2.87 | 28.7 | 0.10    | 0.11    | —     | 0.11    | 0.11    | —      | 0.11    | —    | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                          | 1.24 | 6.46 | 64.6 | 0.12    | 0.25    | —     | 0.25    | 0.25    | —      | 0.25    | —    | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                           | 0.11 | 0.59 | 5.95 | 0.01    | 0.02    | —     | 0.02    | 0.02    | —      | 0.02    | —    | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other Material Handling Equipment | 0.11 | 2.36 | 5.06 | 0.01    | 0.02    | —     | 0.02    | 0.02    | —      | 0.02    | —    | 851    | 851    | 0.03 | 0.01    | 854    |
| Skid Steer Loaders                | 0.03 | 0.77 | 1.04 | < 0.005 | < 0.005 | —     | < 0.005 | < 0.005 | —      | < 0.005 | —    | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber Tired Loaders              | 0.19 | 1.00 | 9.95 | 0.02    | 0.04    | —     | 0.04    | 0.04    | —      | 0.04    | —    | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highway Trucks                | 0.46 | 2.42 | 24.2 | 0.05    | 0.09    | —     | 0.09    | 0.09    | —      | 0.09    | —    | 4,908  | 4,908  | 0.20 | 0.04    | 4,925  |
| Total                             | 3.94 | 22.9 | 205  | 0.42    | 0.78    | —     | 0.78    | 0.78    | —      | 0.78    | —    | 41,547 | 41,547 | 1.69 | 0.34    | 41,690 |

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated Custom Report, 7/19/2024

|                                   |      |      |      |         |         |   |         |         |   |         |   |        |        |      |         |        |
|-----------------------------------|------|------|------|---------|---------|---|---------|---------|---|---------|---|--------|--------|------|---------|--------|
| Daily, Winter (Max)               | —    | —    | —    | —       | —       | — | —       | —       | — | —       | — | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.92 | 4.79 | 49.4 | 0.09    | 0.18    | — | 0.18    | 0.18    | — | 0.18    | — | 9,690  | 9,690  | 0.39 | 0.08    | 9,723  |
| Rubber Tired Dozers               | 0.31 | 1.62 | 16.2 | 0.03    | 0.06    | — | 0.06    | 0.06    | — | 0.06    | — | 3,323  | 3,323  | 0.13 | 0.03    | 3,334  |
| Plate Compactors                  | 0.55 | 2.87 | 28.7 | 0.10    | 0.11    | — | 0.11    | 0.11    | — | 0.11    | — | 6,272  | 6,272  | 0.25 | 0.05    | 6,293  |
| Scrapers                          | 1.24 | 6.46 | 64.6 | 0.12    | 0.25    | — | 0.25    | 0.25    | — | 0.25    | — | 13,134 | 13,134 | 0.53 | 0.11    | 13,179 |
| Graders                           | 0.11 | 0.59 | 5.95 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 1,207  | 1,207  | 0.05 | 0.01    | 1,211  |
| Other Material Handling Equipment | 0.11 | 2.36 | 5.06 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 851    | 851    | 0.03 | 0.01    | 854    |
| Skid Steer Loaders                | 0.03 | 0.77 | 1.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 149    | 149    | 0.01 | < 0.005 | 149    |
| Rubber Tired Loaders              | 0.19 | 1.00 | 9.95 | 0.02    | 0.04    | — | 0.04    | 0.04    | — | 0.04    | — | 2,014  | 2,014  | 0.08 | 0.02    | 2,021  |
| Off-Highway Trucks                | 0.46 | 2.42 | 24.2 | 0.05    | 0.09    | — | 0.09    | 0.09    | — | 0.09    | — | 4,908  | 4,908  | 0.20 | 0.04    | 4,925  |
| Total                             | 3.94 | 22.9 | 205  | 0.42    | 0.78    | — | 0.78    | 0.78    | — | 0.78    | — | 41,547 | 41,547 | 1.69 | 0.34    | 41,690 |
| Annual                            | —    | —    | —    | —       | —       | — | —       | —       | — | —       | — | —      | —      | —    | —       | —      |
| Tractors/Loaders/Backhoes         | 0.14 | 0.74 | 7.58 | 0.01    | 0.03    | — | 0.03    | 0.03    | — | 0.03    | — | 1,349  | 1,349  | 0.05 | 0.01    | 1,354  |
| Rubber Tired Dozers               | 0.05 | 0.25 | 2.49 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 463    | 463    | 0.02 | < 0.005 | 464    |

Increase in Maximum Daily Operations at Prima Deshecha Landfill - Operational and Passenger Vehicles Analysis - Mitigated Custom Report, 7/19/2024

|                                   |         |      |      |         |         |   |         |         |   |         |   |       |       |         |         |       |
|-----------------------------------|---------|------|------|---------|---------|---|---------|---------|---|---------|---|-------|-------|---------|---------|-------|
| Plate Compactors                  | 0.08    | 0.44 | 4.40 | 0.01    | 0.02    | — | 0.02    | 0.02    | — | 0.02    | — | 873   | 873   | 0.04    | 0.01    | 876   |
| Scrapers                          | 0.19    | 0.99 | 9.92 | 0.02    | 0.04    | — | 0.04    | 0.04    | — | 0.04    | — | 1,829 | 1,829 | 0.07    | 0.01    | 1,835 |
| Graders                           | 0.02    | 0.09 | 0.91 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 168   | 168   | 0.01    | < 0.005 | 169   |
| Other Material Handling Equipment | 0.02    | 0.36 | 0.78 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 119   | 119   | < 0.005 | < 0.005 | 119   |
| Skid Steer Loaders                | < 0.005 | 0.12 | 0.16 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 20.7  | 20.7  | < 0.005 | < 0.005 | 20.8  |
| Rubber Tired Loaders              | 0.03    | 0.15 | 1.53 | < 0.005 | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 280   | 280   | 0.01    | < 0.005 | 281   |
| Off-Highway Trucks                | 0.07    | 0.37 | 3.71 | 0.01    | 0.01    | — | 0.01    | 0.01    | — | 0.01    | — | 683   | 683   | 0.03    | 0.01    | 686   |
| Total                             | 0.60    | 3.51 | 31.5 | 0.06    | 0.12    | — | 0.12    | 0.12    | — | 0.12    | — | 5,786 | 5,786 | 0.23    | 0.05    | 5,805 |

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type      | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|        |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|--------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipme<br>nt<br>Type     | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily,<br>Summer<br>(Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily,<br>Winter<br>(Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual                    | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetatio<br>n            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily,<br>Summer<br>(Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total                     | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                     |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual              | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total               | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use            | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Daily, Winter (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Annual              | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Total               | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species             | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | CO2e |
|---------------------|-----|-----|----|-----|-------|-------|-------|--------|--------|--------|------|-------|------|-----|-----|------|
| Daily, Summer (Max) | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Avoided             | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |
| Subtotal            | —   | —   | —  | —   | —     | —     | —     | —      | —      | —      | —    | —     | —    | —   | —   | —    |

|                           |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---------------------------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequeste<br>red           | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily,<br>Winter<br>(Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequeste<br>red           | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual                    | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequeste<br>red           | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed                   | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal                  | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| —                         | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

| Land Use Type              | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|----------------------------|---------------|----------------|--------------|------------|-------------|--------------|------------|----------|
| Other Non-Asphalt Surfaces | 70.0          | 70.0           | 70.0         | 25,565     | 868         | 868          | 868        | 316,746  |

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

| Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|------------------------------------------|------------------------------------------|----------------------------------------------|----------------------------------------------|-----------------------------|
| 0                                        | 0.00                                     | 0.00                                         | 0.00                                         | 1,777,248                   |

5.10.3. Landscape Equipment

| Season      | Unit   | Value |
|-------------|--------|-------|
| Snow Days   | day/yr | 0.00  |
| Summer Days | day/yr | 250   |

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|----------|----------------------|-----|-----|-----|-----------------------|
|----------|----------------------|-----|-----|-----|-----------------------|

|                            |      |     |        |        |      |
|----------------------------|------|-----|--------|--------|------|
| Other Non-Asphalt Surfaces | 0.00 | 589 | 0.0330 | 0.0040 | 0.00 |
|----------------------------|------|-----|--------|--------|------|

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

| Land Use                   | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|----------------------------|-------------------------|--------------------------|
| Other Non-Asphalt Surfaces | 0.00                    | 0.00                     |

5.13. Operational Waste Generation

5.13.1. Unmitigated

| Land Use                   | Waste (ton/year) | Cogeneration (kWh/year) |
|----------------------------|------------------|-------------------------|
| Other Non-Asphalt Surfaces | 0.00             | —                       |

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|
|---------------|----------------|-------------|-----|---------------|----------------------|-------------------|----------------|

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

| Equipment Type            | Fuel Type | Engine Tier  | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---------------------------|-----------|--------------|----------------|---------------|------------|-------------|
| Tractors/Loaders/Backhoes | Diesel    | Tier 4 Final | 4.00           | 10.0          | 460        | 0.37        |
| Tractors/Loaders/Backhoes | Diesel    | Tier 4 Final | 1.00           | 10.0          | 251        | 0.37        |

|                                   |        |              |      |      |      |      |
|-----------------------------------|--------|--------------|------|------|------|------|
| Tractors/Loaders/Backhoes         | Diesel | Tier 4 Final | 1.00 | 10.0 | 110  | 0.37 |
| Rubber Tired Dozers               | Diesel | Tier 4 Final | 2.00 | 10.0 | 354  | 0.40 |
| Plate Compactors                  | Diesel | Tier 4 Final | 2.00 | 10.0 | 582  | 0.43 |
| Scrapers                          | Diesel | Tier 4 Final | 3.00 | 10.0 | 500  | 0.48 |
| Scrapers                          | Diesel | Tier 4 Final | 3.00 | 10.0 | 283  | 0.48 |
| Graders                           | Diesel | Tier 4 Final | 1.00 | 10.0 | 253  | 0.41 |
| Tractors/Loaders/Backhoes         | Diesel | Tier 4 Final | 1.00 | 5.00 | 115  | 0.37 |
| Other Material Handling Equipment | Diesel | Tier 4 Final | 1.00 | 5.00 | 180  | 0.42 |
| Skid Steer Loaders                | Diesel | Tier 4 Final | 1.00 | 5.00 | 69.0 | 0.37 |
| Rubber Tired Loaders              | Diesel | Tier 4 Final | 1.00 | 10.0 | 182  | 0.36 |
| Rubber Tired Loaders              | Diesel | Tier 4 Final | 1.00 | 10.0 | 300  | 0.36 |
| Off-Highway Trucks                | Diesel | Tier 4 Final | 3.00 | 10.0 | 370  | 0.38 |
| Other Material Handling Equipment | Diesel | Tier 4 Final | 1.00 | 5.00 | 73.7 | 0.42 |
| Other Material Handling Equipment | Diesel | Tier 4 Final | 2.00 | 5.00 | 50.0 | 0.40 |

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|----------------|-----------|----------------|---------------|----------------|------------|-------------|
|----------------|-----------|----------------|---------------|----------------|------------|-------------|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|
|----------------|-----------|--------|--------------------------|------------------------------|------------------------------|

5.17. User Defined

| Equipment Type | Fuel Type |
|----------------|-----------|
|----------------|-----------|

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|--------------------------|----------------------|---------------|-------------|
|--------------------------|----------------------|---------------|-------------|

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|--------------------|---------------|-------------|
|--------------------|---------------|-------------|

5.18.2. Sequestration

5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|-----------|--------|------------------------------|------------------------------|
|-----------|--------|------------------------------|------------------------------|

8. User Changes to Default Data

| Screen                   | Justification                                                                                                                                                                                                |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operations: Vehicle Data | The proposed project would generate approximately 3,041 net new average daily trips, including 2,371 truck trips and 70 passenger vehicle trips. This analysis only includes the 70 passenger vehicle trips. |
| Operations: Fleet Mix    | The 70 passenger trips are associated with employee trips only, therefore, this analysis assumes 50% LDA, 25% LDT1, and 25% LDT2.                                                                            |

|                                |                                                                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operations: Off-Road Equipment | Equipment list, including HP and engine tier, was provided by OC Waste & Recycling. This mitigated run assumes the use of all Tier 4 Final equipment as required by Mitigation Measure 4.1-1. |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## **B-2**

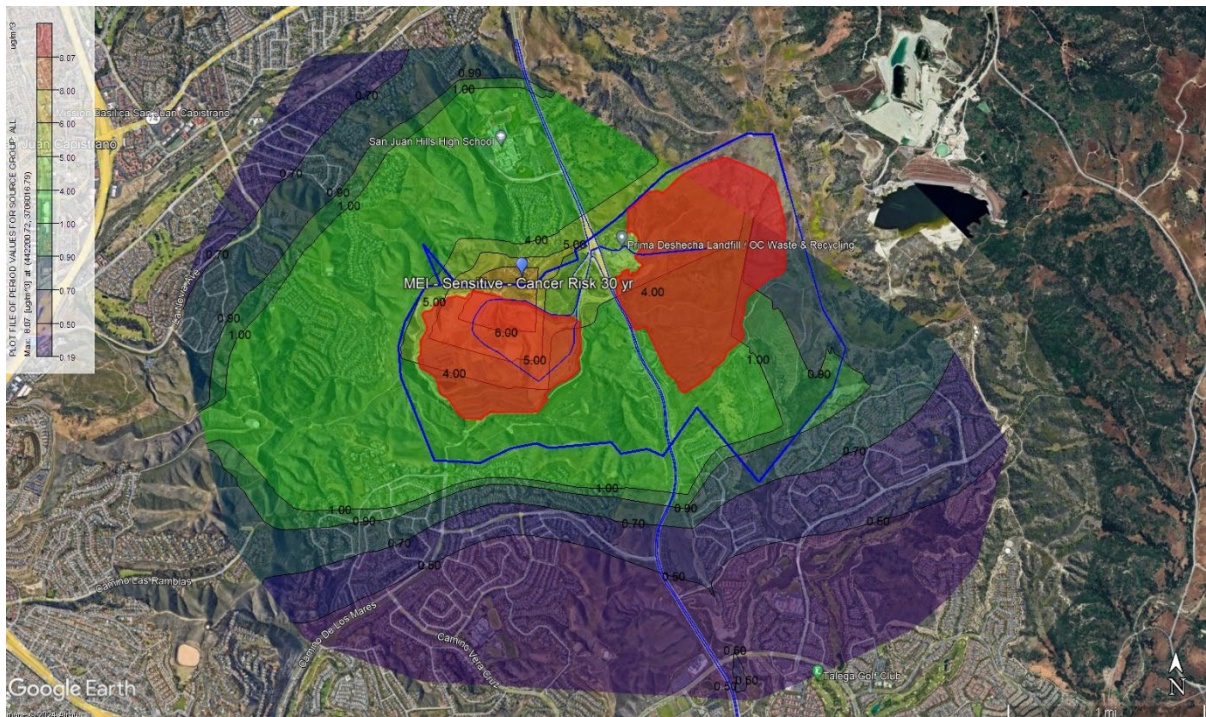
### **HEALTH RISK ASSESSMENT (HRA) OUTPUTS**

**This page intentionally left blank**

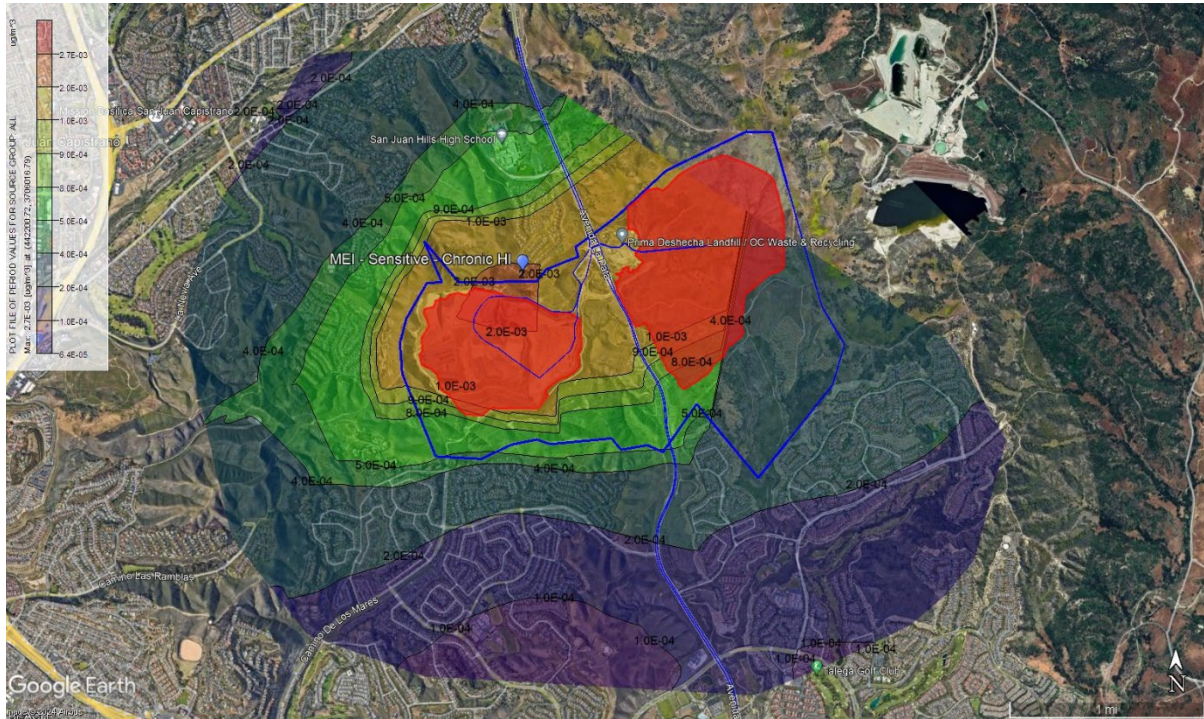
## Project Location



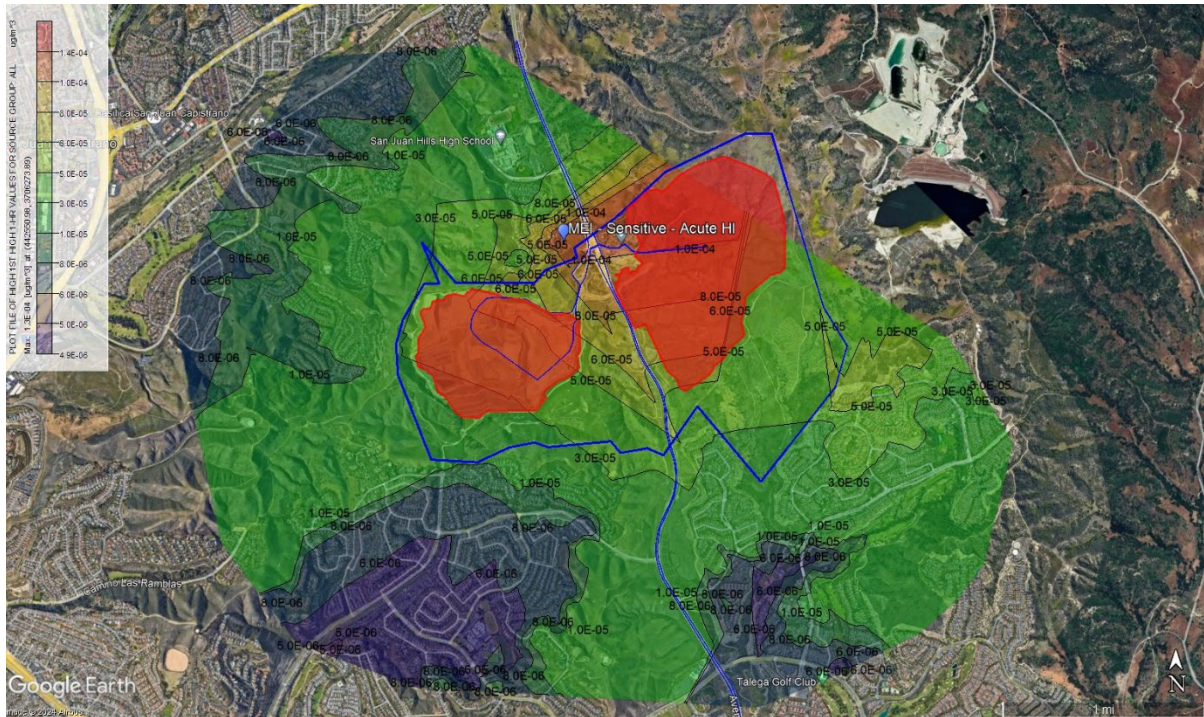
## Cancer Risk – Residential Receptor



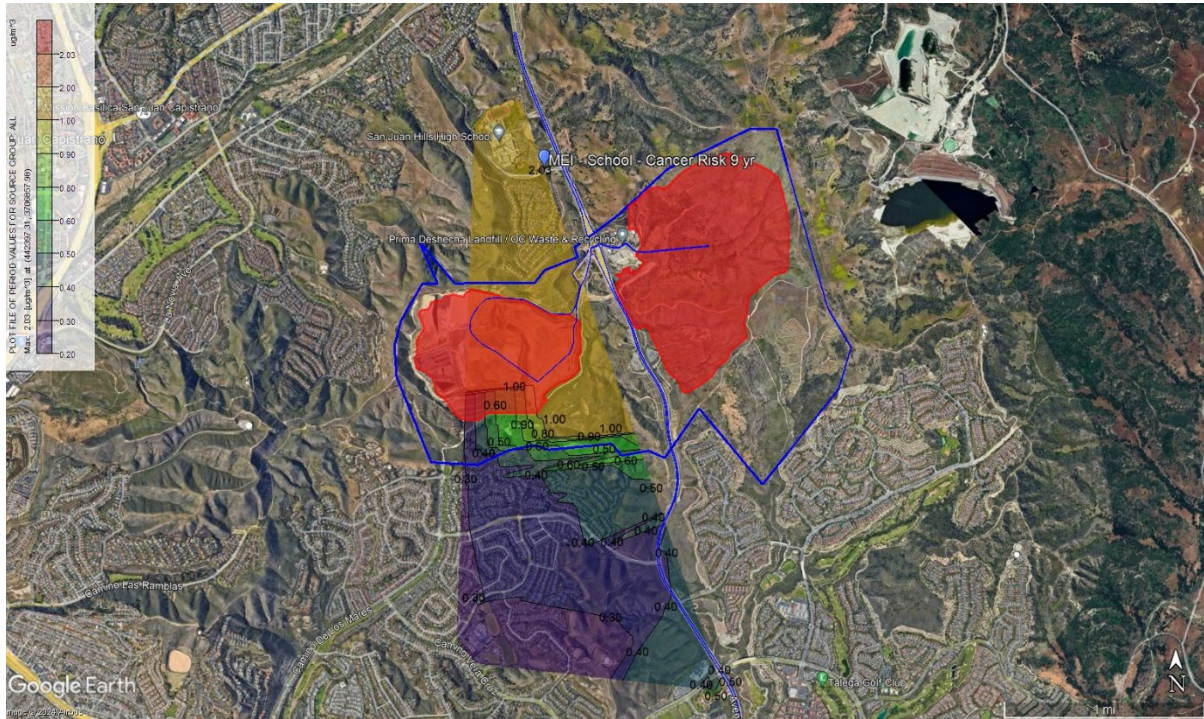
## Chronic Hazard Index – Residential Receptor



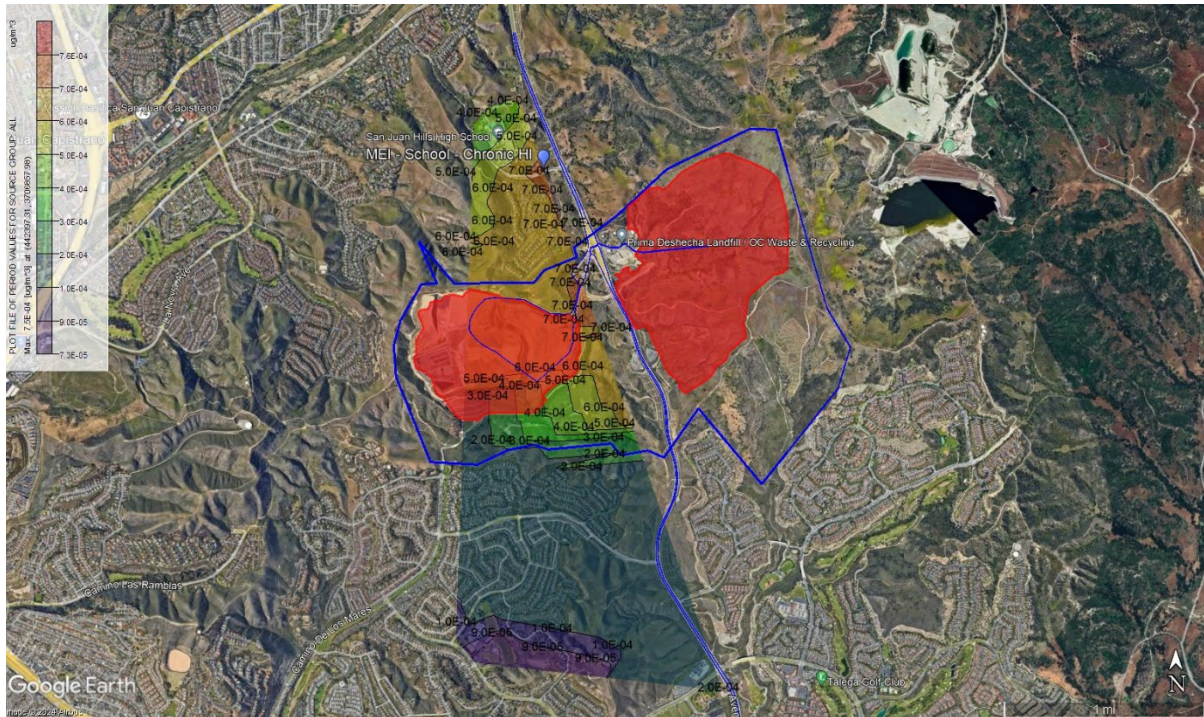
## Acute Hazard Index – Residential Receptor



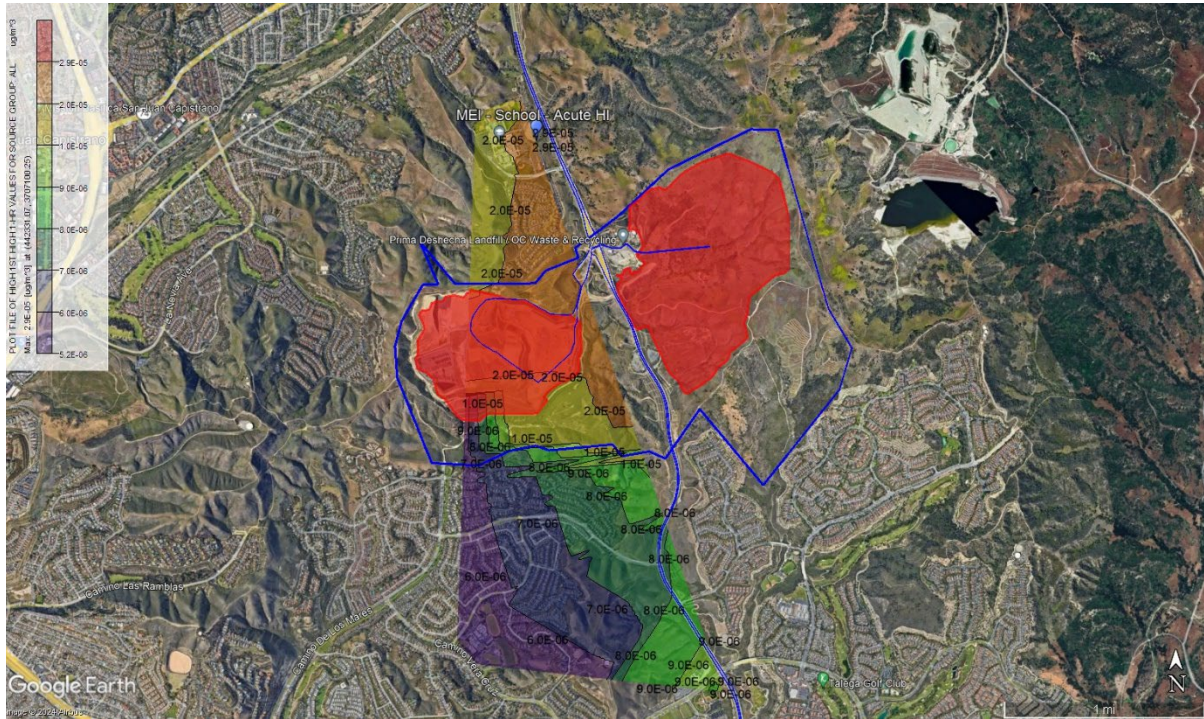
## Cancer Risk – School Receptor



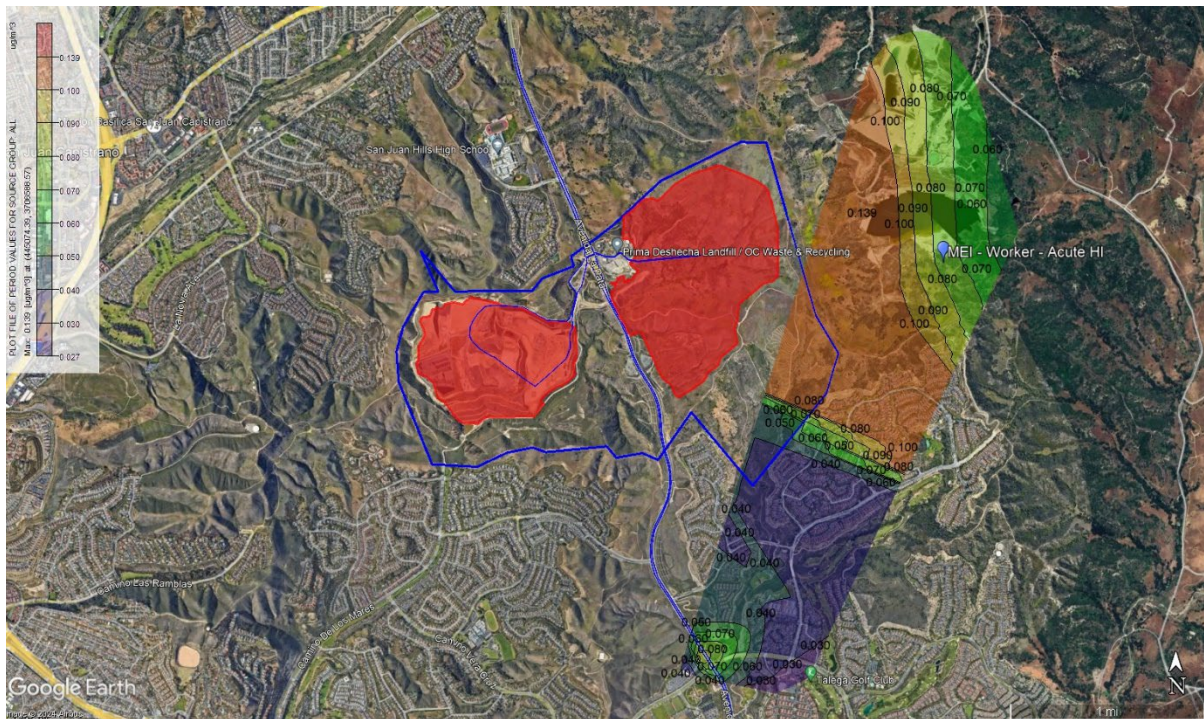
## Chronic Hazard Index – School Receptor



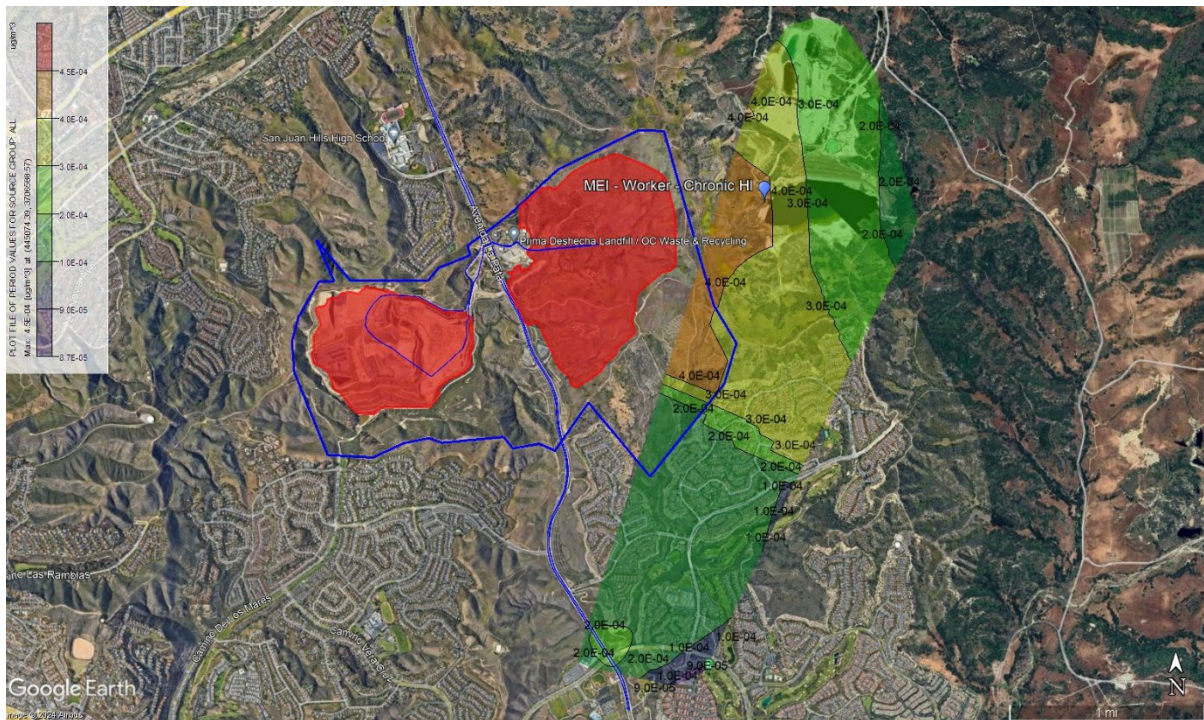
## Acute Hazard Index – School Receptor



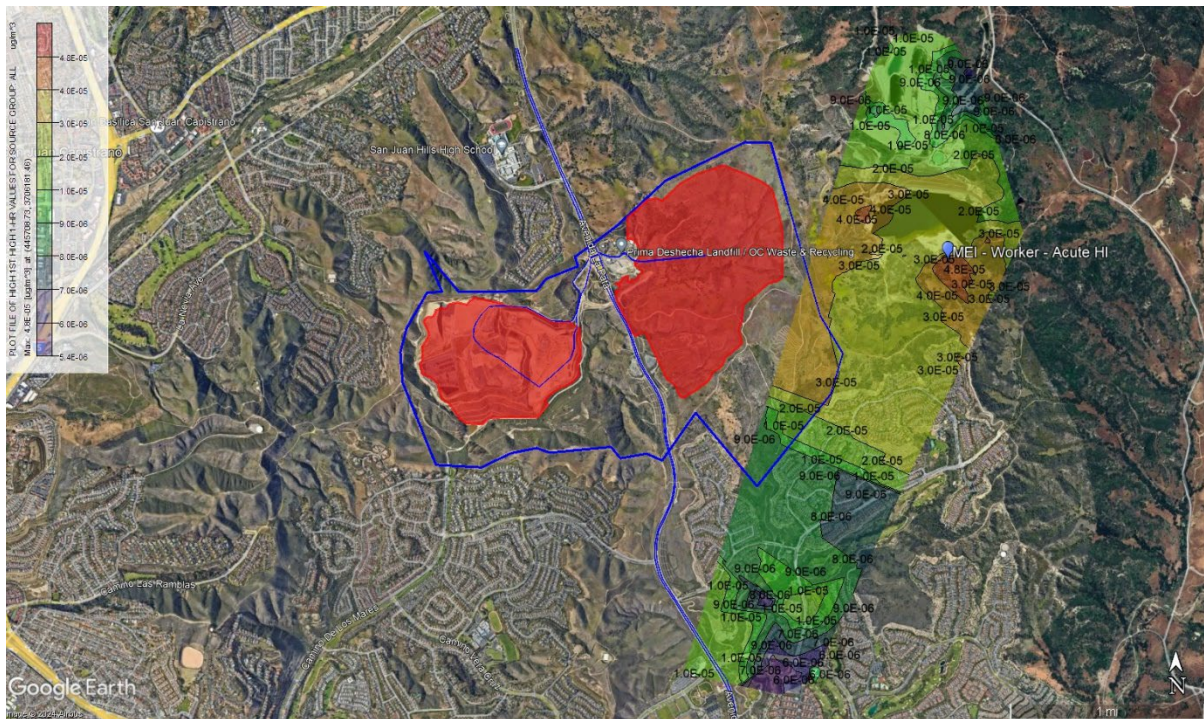
## Cancer Risk – Worker Receptor



## Chronic Hazard Index – Worker Receptor



## Acute Hazard Index – Worker Receptor



| Operational Sensitive Receptor   |            |                  |          |
|----------------------------------|------------|------------------|----------|
| Parameter                        | HARP Rec # | X & Y Coordinate | Result   |
| 30 Yr Cancer Risk (in a Million) | 5532       | 442200.72        | 7.99     |
|                                  |            | 3706016.79       |          |
| 70 Yr Cancer Risk (in a Million) | 0          | 0                | 0.00     |
|                                  |            | 0                |          |
| Chronic HI                       | 5532       | 442200.72        | 2.71E-03 |
|                                  |            | 3706016.79       |          |
| Acute HI                         | 5655       | 442550.98        | 1.19E-04 |
|                                  |            | 3706273.89       |          |
| PM 2.5                           | 5532       | 442200.72        | 0.0135   |
|                                  |            | 3706016.79       |          |

| Operational Worker Receptor      |            |                  |          |
|----------------------------------|------------|------------------|----------|
| Parameter                        | HARP Rec # | X & Y Coordinate | Result   |
| 25 Yr Cancer Risk (in a Million) | 1          | 445074.39        | 0.14     |
|                                  |            | 3706588.57       |          |
| Chronic HI                       | 1          | 445074.39        | 4.45E-04 |
|                                  |            | 3706588.57       |          |
| Acute HI                         | 693        | 445708.73        | 4.38E-05 |
|                                  |            | 3706181.46       |          |
| PM 2.5                           | 1          | 445074.39        | 2.23E-03 |
|                                  |            | 3706588.57       |          |

| Operational School Receptor     |            |                  |          |
|---------------------------------|------------|------------------|----------|
| Parameter                       | HARP Rec # | X & Y Coordinate | Result   |
| 9 Yr Cancer Risk (in a Million) | 161        | 442397.31        | 1.98     |
|                                 |            | 3706857.98       |          |
| Chronic HI                      | 161        | 442397.31        | 7.33E-04 |
|                                 |            | 3706857.98       |          |
| Acute HI                        | 284        | 442331.07        | 2.64E-05 |
|                                 |            | 3707100.25       |          |
| PM 2.5                          | 161        | 442397.31        | 0.0037   |
|                                 |            | 3706857.98       |          |

|             | Zone          | 11                     | Process Coordinates |            |             |              |
|-------------|---------------|------------------------|---------------------|------------|-------------|--------------|
|             | Datum         | WGS 1984               |                     |            |             |              |
|             | KML File Name | OCY2201.38 Project MEI |                     |            |             |              |
| Description | Receptor Type | Model Type             | UTM X               | UTM Y      | Latitude    | Longitude    |
| Operational | Sensitive     | Cancer Risk 30 yr      | 442200.72           | 3706016.79 | 33.49210224 | -117.6222033 |
| Operational | Sensitive     | Cancer Risk 70 yr      | 0                   | 0          |             |              |
| Operational | Sensitive     | Chronic HI             | 442200.72           | 3706016.79 | 33.49210224 | -117.6222033 |
| Operational | Sensitive     | Acute HI               | 442550.98           | 3706273.89 | 33.49443994 | -117.6184494 |
| Operational | Sensitive     | PM 2.5                 | 442200.72           | 3706016.79 | 33.49210224 | -117.6222033 |
| Operational | Worker        | Cancer Risk 25 yr      | 445074.39           | 3706588.57 | 33.49741069 | -117.591305  |
| Operational | Worker        | Chronic HI             | 445074.39           | 3706588.57 | 33.49741069 | -117.591305  |
| Operational | Worker        | Acute HI               | 445708.73           | 3706181.46 | 33.49377129 | -117.5844517 |
| Operational | Worker        | PM 2.5                 | 445074.39           | 3706588.57 | 33.49741069 | -117.591305  |
| Operational | School        | Cancer Risk 9 yr       | 442397.31           | 3706857.98 | 33.49969965 | -117.6201412 |
| Operational | School        | Chronic HI             | 442397.31           | 3706857.98 | 33.49969965 | -117.6201412 |
| Operational | School        | Acute HI               | 442331.07           | 3707100.25 | 33.50188114 | -117.6208699 |
| Operational | School        | PM 2.5                 | 442397.31           | 3706857.98 | 33.49969965 | -117.6201412 |

| General AERMOD Input Parameters             |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|---------------------------------------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| <b>Project Boundary</b>                     |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
| Based on site plan                          |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
| <b>Project Elevation Data</b>               |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Source                 | Lakes Environmental                                                                                                                                                                                                                                                                                                                                               |              |
|                                             | Link                   | <a href="http://www.webgis.com/terraindata.html">http://www.webgis.com/terraindata.html</a>                                                                                                                                                                                                                                                                       |              |
|                                             | Evel Data Descr.       | SRTM1 / SRTM3                                                                                                                                                                                                                                                                                                                                                     |              |
| <b>Project Receptor Grid</b>                |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Telescoping Grid       | Spacing (m)                                                                                                                                                                                                                                                                                                                                                       | Distance (m) |
|                                             | Grid 1                 | 25                                                                                                                                                                                                                                                                                                                                                                | 200          |
|                                             | Grid 2                 | 50                                                                                                                                                                                                                                                                                                                                                                | 400          |
|                                             | Grid 3                 | 100                                                                                                                                                                                                                                                                                                                                                               | 800          |
|                                             | Grid 4                 |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Comments               | Receptors on roads or paring lot areas have been removed.                                                                                                                                                                                                                                                                                                         |              |
| <b>Meteorological Dataset</b>               |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Location               | MSVJ Mission Viejo                                                                                                                                                                                                                                                                                                                                                |              |
|                                             | Provided By            | South Coast AQMD                                                                                                                                                                                                                                                                                                                                                  |              |
|                                             | Years                  | 2011 - 2014, 2016                                                                                                                                                                                                                                                                                                                                                 |              |
|                                             | Elevation (m)          | 107                                                                                                                                                                                                                                                                                                                                                               |              |
|                                             | Link                   | <a href="https://www.aqmd.gov/docs/default-source/air-quality/meteorological-data/aermod-ready-meteorological-data/table-1-meteorological-sites/2017/MissionViejoADJU.zip?sfvrsn=8">https://www.aqmd.gov/docs/default-source/air-quality/meteorological-data/aermod-ready-meteorological-data/table-1-meteorological-sites/2017/MissionViejoADJU.zip?sfvrsn=8</a> |              |
| <b>Operational Modeling Specific Inputs</b> |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
| <b>AERMOD Input Options</b>                 |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Regulatory Options     | Default                                                                                                                                                                                                                                                                                                                                                           |              |
|                                             | Pollutant Type         | Other                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Averaging Period       | Period / Hourly                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Dispersion Coefficient | Urban                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Urban Grouping / Pop   | Y                                                                                                                                                                                                                                                                                                                                                                 | 3,010,232    |
|                                             | # Worker Receptors     | 934                                                                                                                                                                                                                                                                                                                                                               |              |
|                                             | # Sensitive Receptors  | 5772                                                                                                                                                                                                                                                                                                                                                              |              |
|                                             | # of School Receptors  | 314                                                                                                                                                                                                                                                                                                                                                               |              |
| <b>Diesel Truck Idling Parameters</b>       |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Source Type            | Point                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Stack Ht. (m)          | 3.658                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Stack Dia (m)          | 0.044                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Stack Temp (k)         | 388.7                                                                                                                                                                                                                                                                                                                                                             |              |
|                                             | Velocity (m/s)         | 25                                                                                                                                                                                                                                                                                                                                                                |              |
| <b>Diesel Truck Travel Parameters</b>       |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
|                                             | Source Type            | Line Volume                                                                                                                                                                                                                                                                                                                                                       |              |
|                                             | Initial Vertical (m)   | 1.42                                                                                                                                                                                                                                                                                                                                                              |              |
|                                             | Initial Lateral (m)    | 2.84                                                                                                                                                                                                                                                                                                                                                              |              |
|                                             | Release Ht (m)         | Surface                                                                                                                                                                                                                                                                                                                                                           |              |
|                                             | Volume Length (m)      | Roadway Segment Specific                                                                                                                                                                                                                                                                                                                                          |              |
| <b>General HARP Input Parameters</b>        |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |
| Construction                                |                        |                                                                                                                                                                                                                                                                                                                                                                   |              |

| School Receptors              |                   |                                                                                                                                                                                                                                   |
|-------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| School Scenario Parameters    |                   |                                                                                                                                                                                                                                   |
|                               | Class Grade       | K-12                                                                                                                                                                                                                              |
|                               | Starting Age      | 3rd Trimester                                                                                                                                                                                                                     |
|                               | Age Range         | 3rd Trimester - 9 Years Old                                                                                                                                                                                                       |
|                               | Receptor Type     | Individual Resident                                                                                                                                                                                                               |
|                               | Assessment Type   | Cancer / Chronic / Acute                                                                                                                                                                                                          |
|                               | Exposure Duration | 9.25                                                                                                                                                                                                                              |
|                               | Intake Rate       | RMP using the Derived Merthod                                                                                                                                                                                                     |
|                               | Comments          | Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction. |
| School Pathway Parameters     |                   |                                                                                                                                                                                                                                   |
|                               | Pathways          | SCAQMD Manadatory minimum Pathways                                                                                                                                                                                                |
|                               | Deposition Rate   | 0.02                                                                                                                                                                                                                              |
|                               | TAH < 16 yrs      | N                                                                                                                                                                                                                                 |
|                               | TAH ≥ 16 yrs      | N                                                                                                                                                                                                                                 |
| Sensitive Receptors           |                   |                                                                                                                                                                                                                                   |
| Sensitive Scenario Parameters |                   |                                                                                                                                                                                                                                   |
|                               | Starting Age      | 3 <sup>rd</sup> Trimester                                                                                                                                                                                                         |
|                               | Age Range         | 3 <sup>rd</sup> Trimester - 30 Year                                                                                                                                                                                               |
|                               | Receptor Type     | Individual Resident                                                                                                                                                                                                               |
|                               | Assessment Type   | Cancer / Chronic / Acute                                                                                                                                                                                                          |
|                               | Exposure Duration | 30.25                                                                                                                                                                                                                             |
|                               | Intake Rate       | RMP using the Derived Merthod                                                                                                                                                                                                     |
|                               | Comments          | Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction. |
| Sensitive Pathway Parameters  |                   |                                                                                                                                                                                                                                   |
|                               | Pathways          | SCAQMD Manadatory minimum Pathways                                                                                                                                                                                                |
|                               | Deposition Rate   | 0.02                                                                                                                                                                                                                              |
|                               | TAH < 16 yrs      | Y                                                                                                                                                                                                                                 |
|                               | TAH ≥ 16 yrs      | Y                                                                                                                                                                                                                                 |
| Worker Receptors              |                   |                                                                                                                                                                                                                                   |
| Worker Scenario Parameters    |                   |                                                                                                                                                                                                                                   |
|                               | Starting Age      | 16                                                                                                                                                                                                                                |
|                               | Age Range         | 16 - 41                                                                                                                                                                                                                           |
|                               | Receptor Type     | Worker                                                                                                                                                                                                                            |
|                               | Assessment Type   | Cancer / Chronic / Acute                                                                                                                                                                                                          |
|                               | Exposure Duration | 25                                                                                                                                                                                                                                |
|                               | Intake Rate       | OEHHA Derived Merthod                                                                                                                                                                                                             |
|                               | Comments          | Each year of construction is modeled seperately and the impact to each recepetor is summed to estimate the total esposure from construction emissions. Additionally, the starting age is increased for each year of construction. |
| Worker Pathway Parameters     |                   |                                                                                                                                                                                                                                   |
|                               | Pathways          | OEHHA minimum Pathways                                                                                                                                                                                                            |

|  |                 |      |
|--|-----------------|------|
|  | Deposition Rate | 0.02 |
|  | TAH < 16 yrs    | N    |
|  | TAH ≥ 16 yrs    | N    |

|                                  | Num | Type   |
|----------------------------------|-----|--------|
| 02 <=360 lbs (.18 ton) NET       | 146 | Car    |
| 04 <=880 lbs (.44 ton) NET       | 742 | Car    |
| 05 LESS THAN 2.00 TON TRUCK      | 8   | Car    |
| 06 2.00-2.49 TON TRUCK           | 14  | 2-Axle |
| 07 2.50-2.99 TON TRUCK           | 54  | 3-Axle |
| 08 3.00-3.49 TON TRUCK           | 54  | 3-Axle |
| 09 3.50-3.99 TON TRUCK           | 76  | 3-Axle |
| 10 4.00-4.49 TON TRUCK           | 98  | 3-Axle |
| 11 4.50-4.99 TON TRUCK           | 66  | 3-Axle |
| 12 5.00-5.99 TON TRUCK           | 84  | 3-Axle |
| 13 6.00-6.99 TON TRUCK           | 48  | 3-Axle |
| 14 7.00-7.99 TON TRUCK           | 16  | 3-Axle |
| 15 8.00-8.99 TON TRUCK           | 12  | 3-Axle |
| 16 9.00-11.99 TON TRUCK          | 16  | 3-Axle |
| 17 12.00 TON TRUCK & OVER        | 30  | 4-Axle |
| 18 TRACTOR-TRAILER COMBINATION   | 54  | 3-Axle |
| 19 3 Axle Dump Truck & Trailer   | 0   | 3-Axle |
| 20 Tractor W/Double Trailer      | 16  | 4-Axle |
| 21 10.00 -11.99 TON TRUCK        | 2   | 3-Axle |
| 52 2 AXLE DOB BY WEIGHT          | 0   | 2-Axle |
| 53 3 AXLE DOB BY WEIGHT          | 44  | 3-Axle |
| 55 5 AXLE DOB BY WEIGHT          | 0   | 4-Axle |
| 30 TRANSFER TRUCK COMBINATION    | 102 | 3-Axle |
| 32 POD Truck                     | 0   | 2-Axle |
| 40 < 15 Cubic Yards Side Loader  | 0   | 3-Axle |
| 42 2-Axle Side or Rear Loader    | 4   | 2-Axle |
| 44 2-Axle Front Loader           | 0   | 2-Axle |
| 46 3-Axle Side Loader            | 26  | 3-Axle |
| 47 4-Axle Side or Rear Loader    | 46  | 4-Axle |
| 48 3-Axle Front Loader           | 2   | 3-Axle |
| 49 3-Axle Refuse Tractor Trailer | 0   | 3-Axle |
| 50 4-Axle Front Loader           | 46  | 4-Axle |

| Row Labels         | Sum of Num  |
|--------------------|-------------|
| 2-Axle             | 18          |
| 3-Axle             | 754         |
| 4-Axle             | 138         |
| Car                | 896         |
| <b>Grand Total</b> | <b>1806</b> |

| Row Labels  | Sum of Num |         |          |
|-------------|------------|---------|----------|
| 2-Axle      | 18         | 0.96%   | 0.009595 |
| 3-Axle      | 754        | 40.19%  | 0.401919 |
| 4-Axle      | 138        | 7.36%   | 0.073561 |
| Car         | 966        | 51.49%  | 0.514925 |
| Grand Total | 1876       | 100.00% | 1        |

|                   | Daily Trips        |       | 2-Axle Trks | 3-Axle Trks | 4-Axle Trks | Total |
|-------------------|--------------------|-------|-------------|-------------|-------------|-------|
|                   | 3041               |       |             |             |             |       |
|                   | Passenger Vehicles |       |             |             |             |       |
| Percentage        | 51.5%              | 1.0%  | 40.2%       | 7.4%        | 100%        |       |
| # Daily Vehicles  | 1565.89            | 29.18 | 1222.24     | 223.70      | 3041        |       |
| # Annual Vehicles | 483,859            | 9,016 | 377,671     | 69,123      | 939,669     |       |

Truck Travel

| Onsite Truck Travel Emissions |                  |            |                  |
|-------------------------------|------------------|------------|------------------|
| Category                      | # of Trucks / Yr | % of Total | DPM EF (lb/Mile) |
| 2-Axle Trks                   | 9,016            | 2.0%       | 7.55E+00         |
| 3-Axle Trks                   | 377,671          | 82.9%      | 2.12E+01         |
| 4-Axle Trks                   | 69,123           | 15.2%      | 2.01E+00         |
| Total                         | 455,810          | 100%       | ---              |

| Offsite Truck Travel Emissions |                  |            |                  |
|--------------------------------|------------------|------------|------------------|
| Category                       | # of Trucks / Yr | % of Total | DPM EF (lb/Mile) |
| 2-Axle Trks                    | 9,016            | 2.0%       | 4.06E-01         |
| 3-Axle Trks                    | 377,671          | 82.9%      | 7.96E+00         |
| 4-Axle Trks                    | 69,123           | 15.2%      | 3.82E+00         |
| Total                          | 455,810          | 100%       | ---              |

| DPM Lbs/ Yr  | OS_IN    | OS_OUT   | OS_IN2   | OS_OUT2  |          |          | Total    |
|--------------|----------|----------|----------|----------|----------|----------|----------|
| Distance (m) | 1848.5   | 1581.5   | 906.7    | 917.6    | 0        | 0        | 5254.3   |
| %            | 50%      | 50%      | 50%      | 50%      | 0%       | 0%       | 200%     |
| 2-Axle Trks  | 4.34E+00 | 3.71E+00 | 2.13E+00 | 2.15E+00 | 0.00E+00 | 0.00E+00 | 1.23E+01 |
| 3-Axle Trks  | 1.22E+01 | 1.04E+01 | 5.98E+00 | 6.05E+00 | 0.00E+00 | 0.00E+00 | 3.47E+01 |
| 4-Axle Trks  | 1.15E+00 | 9.87E-01 | 5.66E-01 | 5.73E-01 | 0.00E+00 | 0.00E+00 | 3.28E+00 |
| Total        | 1.77E+01 | 1.51E+01 | 8.67E+00 | 8.78E+00 | 0.00E+00 | 0.00E+00 | 5.03E+01 |

| DPM Lbs/ Yr  | NIN      | SIN      | NOUT     | SOUT     |          |          | Total    |
|--------------|----------|----------|----------|----------|----------|----------|----------|
| Gas Only     | N        | N        | N        | N        | N        | N        |          |
| Distance (m) | 1820     | 4206.2   | 1891.3   | 4139.4   | 0        | 0        | 12056.9  |
| %            | 25%      | 25%      | 25%      | 25%      | 0%       | 0%       | 100%     |
| 2-Axle Trks  | 1.15E-01 | 2.65E-01 | 1.19E-01 | 2.61E-01 | 0.00E+00 | 0.00E+00 | 7.60E-01 |
| 3-Axle Trks  | 2.25E+00 | 5.21E+00 | 2.34E+00 | 5.12E+00 | 0.00E+00 | 0.00E+00 | 1.49E+01 |
| 4-Axle Trks  | 1.08E+00 | 2.50E+00 | 1.12E+00 | 2.46E+00 | 0.00E+00 | 0.00E+00 | 7.15E+00 |
| Total        | 3.45E+00 | 7.97E+00 | 3.58E+00 | 7.84E+00 | 0.00E+00 | 0.00E+00 | 2.28E+01 |

Truck Idle

| # of Idling Pts | 2                |                              |           |          |                |          |          |          |          |          |          |          |
|-----------------|------------------|------------------------------|-----------|----------|----------------|----------|----------|----------|----------|----------|----------|----------|
|                 |                  | Truck Idling                 |           |          |                | Idle     |          |          |          |          |          | Total    |
| Category        | # of Trucks / Yr | Idle EF<br>(lbs /Idle-Event) | Time (Hr) | Lbs/ Yr  | Lbs / Yr /Unit | 1        | 1        | 0        | 0        | 0        | 0        | 2        |
| 2-Axle Trks     | 9,016            | 6.11E-05                     | 0.25      | 1.38E-01 | 6.89E-02       | 6.89E-02 | 6.89E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.38E-01 |
| 3-Axle Trks     | 377,671          | 4.01E-05                     | 0.25      | 3.79E+00 | 1.89E+00       | 1.89E+00 | 1.89E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 3.79E+00 |
| 4-Axle Trks     | 69,123           | 7.23E-05                     | 0.25      | 1.25E+00 | 6.25E-01       | 6.25E-01 | 6.25E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.25E+00 |
| Total           | 455,810          | --                           | --        | 5.17E+00 | 2.59E+00       | 2.59E+00 | 2.59E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.17E+00 |

TRUs

| Percent of Trucks    | 0          | # of Units     | 1                   |
|----------------------|------------|----------------|---------------------|
| Onsite TRU Emissions |            |                |                     |
| Category             | Percentage | # of TRUs / Yr | *DPM EF (lbs/Event) |
| 2-Axle Trks          | 15.5       | 0              | 0.00                |
| 3-Axle Trks          | 4.9        | 0              | 0.00                |
| 4-Axle Trks          | 24.3       | 0              | 0.00                |
| Total                | 45         | 0              | Emission/Unit       |
|                      |            |                | 0.00                |

\* TRU EF \* BHP \* Load factor \* Time in hours

Vehicle Emissions

| Vehicle Travel Percentage / Count |                    |         |         |
|-----------------------------------|--------------------|---------|---------|
| Category                          | # of Vehicles / Yr | % LDA   | % LDT   |
| Passenger Vehicles                | 483,859            | 63%     | 37.01%  |
| # Vehicles                        |                    | 304,777 | 179,083 |

| Category | TOG Exhaust EF (lb/Mile) | TOG Runloss EF (lb/Mile) |
|----------|--------------------------|--------------------------|
| LDA      | 2.79E-05                 | 4.78E-04                 |
| LDT      | 5.34E-05                 | 6.78E-04                 |

| CARB TOG Speciation Profile Run Exhaust |                     |          | Lbs/mi/yr |          |
|-----------------------------------------|---------------------|----------|-----------|----------|
| CAS#                                    | Chemical Name       | Fraction | LDA       | LDT      |
| 75070                                   | Acetaldehyde        | 2.80E-03 | 2.38E-02  | 2.68E-02 |
| 107028                                  | Acrolein            | 1.30E-03 | 1.10E-02  | 1.24E-02 |
| 71432                                   | Benzene             | 2.47E-02 | 2.10E-01  | 2.36E-01 |
| 106990                                  | 1,3-Butadiene       | 5.50E-03 | 4.67E-02  | 5.26E-02 |
| 100414                                  | Ethylbenzene        | 1.05E-02 | 8.91E-02  | 1.00E-01 |
| 50000                                   | Formaldehyde        | 1.58E-02 | 1.34E-01  | 1.51E-01 |
| 110543                                  | Hexane              | 1.60E-02 | 1.36E-01  | 1.53E-01 |
| 67561                                   | Methanol            | 1.20E-03 | 1.02E-02  | 1.15E-02 |
| 78933                                   | Methyl Ethyl Ketone | 2.00E-04 | 1.70E-03  | 1.91E-03 |
| 91203                                   | Naphthalene         | 5.00E-04 | 4.24E-03  | 4.78E-03 |
| 115071                                  | Propylene           | 3.06E-02 | 2.60E-01  | 2.93E-01 |
| 100425                                  | Styrene             | 1.20E-03 | 1.02E-02  | 1.15E-02 |
| 108883                                  | Toluene             | 5.76E-02 | 4.89E-01  | 5.51E-01 |
| 1330207                                 | Xylenes             | 4.80E-02 | 4.08E-01  | 4.59E-01 |
| 9901                                    | Diesel              | 1.10E-02 | 7.39E+00  | 4.35E+00 |

| CARB TOG Speciation Profile Evaporative Losses |               |           | Lbs/mi/yr |          |
|------------------------------------------------|---------------|-----------|-----------|----------|
| CAS#                                           | Chemical Name | Fraction  | LDA       | LDT      |
| 71432                                          | Benzene       | 3.600E-03 | 3.06E-02  | 3.44E-02 |
| 100414                                         | Ethylbenzene  | 1.180E-03 | 1.00E-02  | 1.13E-02 |
| 110543                                         | Hexane        | 1.540E-02 | 1.31E-01  | 1.47E-01 |
| 108883                                         | Toluene       | 1.700E-02 | 1.44E-01  | 1.63E-01 |
| 1330207                                        | Xylenes       | 5.780E-03 | 4.91E-02  | 5.53E-02 |

Vehicle Emissions Travel Summary

|                   |                     |           | Source Col | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        | 10       | 11       | 12       | Total<br>Percentage | Total<br>Distance |
|-------------------|---------------------|-----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------|-------------------|
| Emissions Summary |                     |           | Vehicles   | OS_IN    | OS_OUT   | OS_IN2   | OS_OUT2  | 0        | 0        | NIN      | SIN      | NOUT     | SOUT     | 0        | 0        |                     |                   |
|                   |                     |           | Cars       | 50%      | 50%      | 50%      | 50%      | 0%       | 0%       | 25%      | 25%      | 25%      | 25%      | 0%       | 0%       |                     |                   |
|                   |                     |           | Trucks     | 50%      | 50%      | 50%      | 50%      | 0%       | 0%       | 25%      | 25%      | 25%      | 25%      | 0%       | 0%       |                     |                   |
| CAS#              | Chemical Name       | Lbs/mi/Hr | Lbs/mi/ Yr | 50.00%   | 50.00%   | 50.00%   | 50.00%   | 0.06%    | 0.00%    | 0.01%    | 0.03%    | 0.01%    | 0.03%    | 0.00%    | 0.00%    | Lbs/ Hr             | Lbs/ Yr           |
|                   |                     |           |            | Lbs/ Hr  | Lbs/ Yr  | Lbs/ Hr  | Lbs/ Yr  | Lbs/ Hr  | Lbs/ Yr  | Lbs/ Hr  | Lbs/ Yr  | Lbs/ Hr  | Lbs/ Yr  | Lbs/ Hr  | Lbs/ Yr  |                     |                   |
| 75070             | Acetaldehyde        | 1.68E-05  | 5.05E-02   | 8.42E-06 | 2.53E-02 | 8.42E-06 | 2.53E-02 | 8.42E-06 | 2.53E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.05E-06 | 3.16E-03 | 1.05E-06            | 3.16E-03          |
| 107028            | Acrolein            | 7.82E-06  | 2.35E-02   | 3.91E-06 | 1.17E-02 | 3.91E-06 | 1.17E-02 | 3.91E-06 | 1.17E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.89E-07 | 1.47E-03 | 4.89E-07            | 1.47E-03          |
| 71432             | Benzene             | 1.70E-04  | 5.11E-01   | 8.51E-05 | 2.55E-01 | 8.51E-05 | 2.55E-01 | 8.51E-05 | 2.55E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.06E-05 | 3.19E-02 | 1.06E-05            | 3.19E-02          |
| 106990            | 1,3-Butadiene       | 3.31E-05  | 9.93E-02   | 1.65E-05 | 4.96E-02 | 1.65E-05 | 4.96E-02 | 1.65E-05 | 4.96E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.07E-06 | 6.20E-03 | 2.07E-06            | 6.20E-03          |
| 100414            | Ethylbenzene        | 7.03E-05  | 2.11E-01   | 3.51E-05 | 1.05E-01 | 3.51E-05 | 1.05E-01 | 3.51E-05 | 1.05E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.39E-06 | 1.32E-02 | 4.39E-06            | 1.32E-02          |
| 50000             | Formaldehyde        | 9.51E-05  | 2.85E-01   | 4.75E-05 | 1.43E-01 | 4.75E-05 | 1.43E-01 | 4.75E-05 | 1.43E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 5.94E-06 | 1.78E-02 | 5.94E-06            | 1.78E-02          |
| 110543            | Hexane              | 1.89E-04  | 5.67E-01   | 9.45E-05 | 2.83E-01 | 9.45E-05 | 2.83E-01 | 9.45E-05 | 2.83E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.18E-05 | 3.54E-02 | 1.18E-05            | 3.54E-02          |
| 67561             | Methanol            | 7.22E-06  | 2.17E-02   | 3.61E-06 | 1.08E-02 | 3.61E-06 | 1.08E-02 | 3.61E-06 | 1.08E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-07 | 1.35E-03 | 4.51E-07            | 1.35E-03          |
| 78933             | Methyl Ethyl Ketone | 1.20E-06  | 3.61E-03   | 6.02E-07 | 1.80E-03 | 6.02E-07 | 1.80E-03 | 6.02E-07 | 1.80E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 7.52E-08 | 2.26E-04 | 7.52E-08            | 2.26E-04          |
| 91203             | Naphthalene         | 3.01E-06  | 9.02E-03   | 1.50E-06 | 4.51E-03 | 1.50E-06 | 4.51E-03 | 1.50E-06 | 4.51E-03 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.88E-07 | 5.64E-04 | 1.88E-07            | 5.64E-04          |
| 115071            | Propylene           | 1.84E-04  | 5.52E-01   | 9.21E-05 | 2.76E-01 | 9.21E-05 | 2.76E-01 | 9.21E-05 | 2.76E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 1.15E-05 | 3.45E-02 | 1.15E-05            | 3.45E-02          |
| 100425            | Styrene             | 7.22E-06  | 2.17E-02   | 3.61E-06 | 1.08E-02 | 3.61E-06 | 1.08E-02 | 3.61E-06 | 1.08E-02 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 4.51E-07 | 1.35E-03 | 4.51E-07            | 1.35E-03          |
| 108883            | Toluene             | 4.49E-04  | 1.35E+00   | 2.24E-04 | 6.73E-01 | 2.24E-04 | 6.73E-01 | 2.24E-04 | 6.73E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.81E-05 | 8.42E-02 | 2.81E-05            | 8.42E-02          |
| 1330207           | Xylenes             | 3.24E-04  | 9.71E-01   | 1.62E-04 | 4.85E-01 | 1.62E-04 | 4.85E-01 | 1.62E-04 | 4.85E-01 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 0.00E+00 | 2.02E-05 | 6.07E-02 | 2.02E-05            | 6.07E-02          |
| 9901              | Diesel              | 3.91E-03  | 1.17E+01   | 1.96E-03 | 2.36E+01 | 1.96E-03 | 2.10E+01 | 1.96E-03 | 1.45E+01 | 9.78E-04 | 1.17E+01 | 0.00E+00 | 0.00E+00 | 2.45E-04 | 4.18E+00 | 2.45E-04            | 8.70E+00          |
|                   |                     |           |            |          |          |          |          |          |          |          |          |          |          | 2.45E-04 | 4.32E+00 | 2.45E-04            | 8.57E+00          |

[illegible]



[illegible]



|         |   |   |                           |     |          |          |   |
|---------|---|---|---------------------------|-----|----------|----------|---|
| OS_IN   | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 2.53E-02 | 8.42E-06 | 1 |
| OS_IN   | 0 | 0 | 107028 Acrolein           | 2.8 | 1.17E-02 | 3.91E-06 | 1 |
| OS_IN   | 0 | 0 | 71432 Benzene             | 2.8 | 2.55E-01 | 8.51E-05 | 1 |
| OS_IN   | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 4.96E-02 | 1.65E-05 | 1 |
| OS_IN   | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.05E-01 | 3.51E-05 | 1 |
| OS_IN   | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.43E-01 | 4.75E-05 | 1 |
| OS_IN   | 0 | 0 | 110543 Hexane             | 2.8 | 2.83E-01 | 9.45E-05 | 1 |
| OS_IN   | 0 | 0 | 67561 Methanol            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_IN   | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 1.80E-03 | 6.02E-07 | 1 |
| OS_IN   | 0 | 0 | 91203 Naphthalene         | 2.8 | 4.51E-03 | 1.50E-06 | 1 |
| OS_IN   | 0 | 0 | 115071 Propylene          | 2.8 | 2.76E-01 | 9.21E-05 | 1 |
| OS_IN   | 0 | 0 | 100425 Styrene            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_IN   | 0 | 0 | 108883 Toluene            | 2.8 | 6.73E-01 | 2.24E-04 | 1 |
| OS_IN   | 0 | 0 | 1330207 Xylenes           | 2.8 | 4.85E-01 | 1.62E-04 | 1 |
| OS_IN   | 0 | 0 | 9901 Diesel               | 2.8 | 2.36E+01 | 1.96E-03 | 1 |
| OS_OUT  | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 2.53E-02 | 8.42E-06 | 1 |
| OS_OUT  | 0 | 0 | 107028 Acrolein           | 2.8 | 1.17E-02 | 3.91E-06 | 1 |
| OS_OUT  | 0 | 0 | 71432 Benzene             | 2.8 | 2.55E-01 | 8.51E-05 | 1 |
| OS_OUT  | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 4.96E-02 | 1.65E-05 | 1 |
| OS_OUT  | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.05E-01 | 3.51E-05 | 1 |
| OS_OUT  | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.43E-01 | 4.75E-05 | 1 |
| OS_OUT  | 0 | 0 | 110543 Hexane             | 2.8 | 2.83E-01 | 9.45E-05 | 1 |
| OS_OUT  | 0 | 0 | 67561 Methanol            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_OUT  | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 1.80E-03 | 6.02E-07 | 1 |
| OS_OUT  | 0 | 0 | 91203 Naphthalene         | 2.8 | 4.51E-03 | 1.50E-06 | 1 |
| OS_OUT  | 0 | 0 | 115071 Propylene          | 2.8 | 2.76E-01 | 9.21E-05 | 1 |
| OS_OUT  | 0 | 0 | 100425 Styrene            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_OUT  | 0 | 0 | 108883 Toluene            | 2.8 | 6.73E-01 | 2.24E-04 | 1 |
| OS_OUT  | 0 | 0 | 1330207 Xylenes           | 2.8 | 4.85E-01 | 1.62E-04 | 1 |
| OS_OUT  | 0 | 0 | 9901 Diesel               | 2.8 | 2.10E+01 | 1.96E-03 | 1 |
| OS_IN2  | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 2.53E-02 | 8.42E-06 | 1 |
| OS_IN2  | 0 | 0 | 107028 Acrolein           | 2.8 | 1.17E-02 | 3.91E-06 | 1 |
| OS_IN2  | 0 | 0 | 71432 Benzene             | 2.8 | 2.55E-01 | 8.51E-05 | 1 |
| OS_IN2  | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 4.96E-02 | 1.65E-05 | 1 |
| OS_IN2  | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.05E-01 | 3.51E-05 | 1 |
| OS_IN2  | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.43E-01 | 4.75E-05 | 1 |
| OS_IN2  | 0 | 0 | 110543 Hexane             | 2.8 | 2.83E-01 | 9.45E-05 | 1 |
| OS_IN2  | 0 | 0 | 67561 Methanol            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_IN2  | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 1.80E-03 | 6.02E-07 | 1 |
| OS_IN2  | 0 | 0 | 91203 Naphthalene         | 2.8 | 4.51E-03 | 1.50E-06 | 1 |
| OS_IN2  | 0 | 0 | 115071 Propylene          | 2.8 | 2.76E-01 | 9.21E-05 | 1 |
| OS_IN2  | 0 | 0 | 100425 Styrene            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_IN2  | 0 | 0 | 108883 Toluene            | 2.8 | 6.73E-01 | 2.24E-04 | 1 |
| OS_IN2  | 0 | 0 | 1330207 Xylenes           | 2.8 | 4.85E-01 | 1.62E-04 | 1 |
| OS_IN2  | 0 | 0 | 9901 Diesel               | 2.8 | 1.45E+01 | 1.96E-03 | 1 |
| OS_OUT2 | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 2.53E-02 | 8.42E-06 | 1 |

|         |   |   |                           |     |          |          |   |
|---------|---|---|---------------------------|-----|----------|----------|---|
| OS_OUT2 | 0 | 0 | 107028 Acrolein           | 2.8 | 1.17E-02 | 3.91E-06 | 1 |
| OS_OUT2 | 0 | 0 | 71432 Benzene             | 2.8 | 2.55E-01 | 8.51E-05 | 1 |
| OS_OUT2 | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 4.96E-02 | 1.65E-05 | 1 |
| OS_OUT2 | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.05E-01 | 3.51E-05 | 1 |
| OS_OUT2 | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.43E-01 | 4.75E-05 | 1 |
| OS_OUT2 | 0 | 0 | 110543 Hexane             | 2.8 | 2.83E-01 | 9.45E-05 | 1 |
| OS_OUT2 | 0 | 0 | 67561 Methanol            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_OUT2 | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 1.80E-03 | 6.02E-07 | 1 |
| OS_OUT2 | 0 | 0 | 91203 Naphthalene         | 2.8 | 4.51E-03 | 1.50E-06 | 1 |
| OS_OUT2 | 0 | 0 | 115071 Propylene          | 2.8 | 2.76E-01 | 9.21E-05 | 1 |
| OS_OUT2 | 0 | 0 | 100425 Styrene            | 2.8 | 1.08E-02 | 3.61E-06 | 1 |
| OS_OUT2 | 0 | 0 | 108883 Toluene            | 2.8 | 6.73E-01 | 2.24E-04 | 1 |
| OS_OUT2 | 0 | 0 | 1330207 Xylenes           | 2.8 | 4.85E-01 | 1.62E-04 | 1 |
| OS_OUT2 | 0 | 0 | 9901 Diesel               | 2.8 | 1.17E+01 | 9.78E-04 | 1 |
| 0       | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0       | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| NIN     | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 3.16E-03 | 1.05E-06 | 1 |
| NIN     | 0 | 0 | 107028 Acrolein           | 2.8 | 1.47E-03 | 4.89E-07 | 1 |
| NIN     | 0 | 0 | 71432 Benzene             | 2.8 | 3.19E-02 | 1.06E-05 | 1 |

|      |   |   |                           |     |          |          |   |
|------|---|---|---------------------------|-----|----------|----------|---|
| NIN  | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 6.20E-03 | 2.07E-06 | 1 |
| NIN  | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.32E-02 | 4.39E-06 | 1 |
| NIN  | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.78E-02 | 5.94E-06 | 1 |
| NIN  | 0 | 0 | 110543 Hexane             | 2.8 | 3.54E-02 | 1.18E-05 | 1 |
| NIN  | 0 | 0 | 67561 Methanol            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| NIN  | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 2.26E-04 | 7.52E-08 | 1 |
| NIN  | 0 | 0 | 91203 Naphthalene         | 2.8 | 5.64E-04 | 1.88E-07 | 1 |
| NIN  | 0 | 0 | 115071 Propylene          | 2.8 | 3.45E-02 | 1.15E-05 | 1 |
| NIN  | 0 | 0 | 100425 Styrene            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| NIN  | 0 | 0 | 108883 Toluene            | 2.8 | 8.42E-02 | 2.81E-05 | 1 |
| NIN  | 0 | 0 | 1330207 Xylenes           | 2.8 | 6.07E-02 | 2.02E-05 | 1 |
| NIN  | 0 | 0 | 9901 Diesel               | 2.8 | 4.18E+00 | 2.45E-04 | 1 |
| SIN  | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 3.16E-03 | 1.05E-06 | 1 |
| SIN  | 0 | 0 | 107028 Acrolein           | 2.8 | 1.47E-03 | 4.89E-07 | 1 |
| SIN  | 0 | 0 | 71432 Benzene             | 2.8 | 3.19E-02 | 1.06E-05 | 1 |
| SIN  | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 6.20E-03 | 2.07E-06 | 1 |
| SIN  | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.32E-02 | 4.39E-06 | 1 |
| SIN  | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.78E-02 | 5.94E-06 | 1 |
| SIN  | 0 | 0 | 110543 Hexane             | 2.8 | 3.54E-02 | 1.18E-05 | 1 |
| SIN  | 0 | 0 | 67561 Methanol            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| SIN  | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 2.26E-04 | 7.52E-08 | 1 |
| SIN  | 0 | 0 | 91203 Naphthalene         | 2.8 | 5.64E-04 | 1.88E-07 | 1 |
| SIN  | 0 | 0 | 115071 Propylene          | 2.8 | 3.45E-02 | 1.15E-05 | 1 |
| SIN  | 0 | 0 | 100425 Styrene            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| SIN  | 0 | 0 | 108883 Toluene            | 2.8 | 8.42E-02 | 2.81E-05 | 1 |
| SIN  | 0 | 0 | 1330207 Xylenes           | 2.8 | 6.07E-02 | 2.02E-05 | 1 |
| SIN  | 0 | 0 | 9901 Diesel               | 2.8 | 8.70E+00 | 2.45E-04 | 1 |
| NOUT | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 3.16E-03 | 1.05E-06 | 1 |
| NOUT | 0 | 0 | 107028 Acrolein           | 2.8 | 1.47E-03 | 4.89E-07 | 1 |
| NOUT | 0 | 0 | 71432 Benzene             | 2.8 | 3.19E-02 | 1.06E-05 | 1 |
| NOUT | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 6.20E-03 | 2.07E-06 | 1 |
| NOUT | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.32E-02 | 4.39E-06 | 1 |
| NOUT | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.78E-02 | 5.94E-06 | 1 |
| NOUT | 0 | 0 | 110543 Hexane             | 2.8 | 3.54E-02 | 1.18E-05 | 1 |
| NOUT | 0 | 0 | 67561 Methanol            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| NOUT | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 2.26E-04 | 7.52E-08 | 1 |
| NOUT | 0 | 0 | 91203 Naphthalene         | 2.8 | 5.64E-04 | 1.88E-07 | 1 |
| NOUT | 0 | 0 | 115071 Propylene          | 2.8 | 3.45E-02 | 1.15E-05 | 1 |
| NOUT | 0 | 0 | 100425 Styrene            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| NOUT | 0 | 0 | 108883 Toluene            | 2.8 | 8.42E-02 | 2.81E-05 | 1 |
| NOUT | 0 | 0 | 1330207 Xylenes           | 2.8 | 6.07E-02 | 2.02E-05 | 1 |
| NOUT | 0 | 0 | 9901 Diesel               | 2.8 | 4.32E+00 | 2.45E-04 | 1 |
| SOUT | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 3.16E-03 | 1.05E-06 | 1 |
| SOUT | 0 | 0 | 107028 Acrolein           | 2.8 | 1.47E-03 | 4.89E-07 | 1 |
| SOUT | 0 | 0 | 71432 Benzene             | 2.8 | 3.19E-02 | 1.06E-05 | 1 |
| SOUT | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 6.20E-03 | 2.07E-06 | 1 |
| SOUT | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 1.32E-02 | 4.39E-06 | 1 |

|      |   |   |                           |     |          |          |   |
|------|---|---|---------------------------|-----|----------|----------|---|
| SOUT | 0 | 0 | 50000 Formaldehyde        | 2.8 | 1.78E-02 | 5.94E-06 | 1 |
| SOUT | 0 | 0 | 110543 Hexane             | 2.8 | 3.54E-02 | 1.18E-05 | 1 |
| SOUT | 0 | 0 | 67561 Methanol            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| SOUT | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 2.26E-04 | 7.52E-08 | 1 |
| SOUT | 0 | 0 | 91203 Naphthalene         | 2.8 | 5.64E-04 | 1.88E-07 | 1 |
| SOUT | 0 | 0 | 115071 Propylene          | 2.8 | 3.45E-02 | 1.15E-05 | 1 |
| SOUT | 0 | 0 | 100425 Styrene            | 2.8 | 1.35E-03 | 4.51E-07 | 1 |
| SOUT | 0 | 0 | 108883 Toluene            | 2.8 | 8.42E-02 | 2.81E-05 | 1 |
| SOUT | 0 | 0 | 1330207 Xylenes           | 2.8 | 6.07E-02 | 2.02E-05 | 1 |
| SOUT | 0 | 0 | 9901 Diesel               | 2.8 | 8.57E+00 | 2.45E-04 | 1 |
| 0    | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |

|      |   |   |                           |     |          |          |   |
|------|---|---|---------------------------|-----|----------|----------|---|
| Idle | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| Idle | 0 | 0 | 9901 Diesel               | 2.8 | 2.59E+00 | 2.59E+00 | 1 |
| 0    | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 9901 Diesel               | 2.8 | 2.59E+00 | 2.59E+00 | 1 |
| 0    | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| 0    | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |

|     |   |   |   |                           |     |          |          |   |
|-----|---|---|---|---------------------------|-----|----------|----------|---|
|     | 0 | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 100425 Styrene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 108883 Toluene            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 1330207 Xylenes           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
|     | 0 | 0 | 0 | 9901 Diesel               | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 75070 Acetaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 107028 Acrolein           | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 71432 Benzene             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 106990 1-3,Butadiene      | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 100414 Ethylbenzene       | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 50000 Formaldehyde        | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 110543 Hexane             | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 67561 Methanol            | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 78933 Methyl Ethyl Ketone | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 91203 Naphthalene         | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU |   | 0 | 0 | 115071 Propylene          | 2.8 | 0.00E+00 | 0.00E+00 | 1 |

|     |   |   |                 |     |          |          |   |
|-----|---|---|-----------------|-----|----------|----------|---|
| TRU | 0 | 0 | 100425 Styrene  | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU | 0 | 0 | 108883 Toluene  | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU | 0 | 0 | 1330207 Xylenes | 2.8 | 0.00E+00 | 0.00E+00 | 1 |
| TRU | 0 | 0 | 9901 Diesel     | 2.8 | 0.00E+00 | 0.00E+00 | 1 |

| Region | Calendar Year | Vehicle Category | Model Year | Speed | Fuel    | PM2.5_RUNEX | PM10_RUNEX  |
|--------|---------------|------------------|------------|-------|---------|-------------|-------------|
| Orange | 2024          | HHDT             | Aggregate  | 5     | Diesel  | 0.015019228 | 0.015698331 |
| Orange | 2024          | HHDT             | Aggregate  | 10    | Diesel  | 0.012595071 | 0.013164564 |
| Orange | 2024          | HHDT             | Aggregate  | 15    | Diesel  | 0.010212919 | 0.010674701 |
|        |               |                  |            |       | Average | 0.012609073 | 0.013179199 |
| Orange | 2024          | LDT1             | Aggregate  | 5     | Diesel  | 0.975384395 | 1.019486949 |
| Orange | 2024          | LDT1             | Aggregate  | 10    | Diesel  | 0.679045728 | 0.709749163 |
| Orange | 2024          | LDT1             | Aggregate  | 15    | Diesel  | 0.494692363 | 0.517060157 |
| Orange | 2024          | LDT2             | Aggregate  | 5     | Diesel  | 0.011942297 | 0.012482275 |
| Orange | 2024          | LDT2             | Aggregate  | 10    | Diesel  | 0.010415475 | 0.010886416 |
| Orange | 2024          | LDT2             | Aggregate  | 15    | Diesel  | 0.008751748 | 0.009147464 |
|        |               |                  |            |       | Average | 0.363372001 | 0.379802071 |
| Orange | 2024          | MHDT             | Aggregate  | 5     | Diesel  | 0.031208209 | 0.032619305 |
| Orange | 2024          | MHDT             | Aggregate  | 10    | Diesel  | 0.025484744 | 0.026637051 |
| Orange | 2024          | MHDT             | Aggregate  | 15    | Diesel  | 0.016469953 | 0.017214651 |
|        |               |                  |            |       | Average | 0.024387635 | 0.025490336 |

Source: EMFAC2021 (v1.0.2) Emission Rates  
Region Type: County  
Region: Orange  
Calendar Year: 2024  
Season: Annual  
Vehicle Classification: EMFAC2007 Categories  
Units: miles/day for CVMT and EVMT, g/mile for RUNEX, PMBW and PMTW, mph for Speed, kWh/mile for Energy Consumption, gallon/mile for Fuel Consumption. PHEV calculated based on total VMT.

| Region | Calendar Year | Vehicle Category | Model Year | Speed | Fuel   | Total V | CVMT        | EVMT | NOx_RUNEX     | PM2.5_RUNEX | PM10_RUNEX  | CO2_RUNEX   | CH4_RUNEX   | N2O_RUNEX   | ROG_RUNEX   | TOG_RUNEX   | CO_RUNEX    | SOx_RUNEX   | NH3_RUNE | PM10_PME | PM2.5_PM | Fuel Consu | Energy Consumption |
|--------|---------------|------------------|------------|-------|--------|---------|-------------|------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------|----------|----------|------------|--------------------|
| Orange | 2024          | HHDT             | Aggregate  | 5     | Diesel | 42.25   | 42.253762   |      | 0 10.91757442 | 0.015019228 | 0.015698331 | 3284.693077 | 0.006303314 | 0.517504732 | 0.135708625 | 0.154493939 | 1.16325764  | 0.031104079 | 0.213611 | 0.139117 | 0.048691 | 0.32344    | 0                  |
| Orange | 2024          | HHDT             | Aggregate  | 10    | Diesel | 2431    | 2431.005491 |      | 0 7.952475115 | 0.012595071 | 0.013164564 | 2802.075859 | 0.003812115 | 0.441468193 | 0.0820738   | 0.093434773 | 0.740423512 | 0.026533983 | 0.21447  | 0.1388   | 0.04858  | 0.275918   | 0                  |
| Orange | 2024          | HHDT             | Aggregate  | 15    | Diesel | 4498    | 4498.229699 |      | 0 5.413691861 | 0.010212919 | 0.010674701 | 2333.821941 | 0.001984239 | 0.367694597 | 0.042720122 | 0.048633607 | 0.403952764 | 0.022099898 | 0.21238  | 0.137759 | 0.048216 | 0.229809   | 0                  |
| Orange | 2024          | LDA              | Aggregate  | 5     | Diesel | 16.75   | 16.7536817  |      | 0 0.225413482 | 0.051944546 | 0.054293248 | 593.1366508 | 0.012456455 | 0.093448921 | 0.268180143 | 0.305305264 | 4.434113933 | 0.005620271 | 0.0031   | 0.00605  | 0.002118 | 0.058406   | 0                  |
| Orange | 2024          | LDA              | Aggregate  | 10    | Diesel | 499     | 498.9976246 |      | 0 0.207010362 | 0.038236455 | 0.039965338 | 494.138817  | 0.009175145 | 0.077851772 | 0.197535474 | 0.224881004 | 3.306821605 | 0.004682216 | 0.0031   | 0.007482 | 0.002619 | 0.048657   | 0                  |
| Orange | 2024          | LDA              | Aggregate  | 15    | Diesel | 900.2   | 900.1605763 |      | 0 0.174884164 | 0.029004192 | 0.030315633 | 406.4277709 | 0.004957181 | 0.064032861 | 0.106725186 | 0.121499528 | 1.674917124 | 0.00385111  | 0.0031   | 0.008906 | 0.003117 | 0.040021   | 0                  |
| Orange | 2024          | LDT1             | Aggregate  | 5     | Diesel | 0.082   | 0.082309475 |      | 0 1.080613507 | 0.975384395 | 1.019486949 | 1048.427372 | 0.05690266  | 0.165180159 | 1.225080769 | 1.394673007 | 4.78755522  | 0.009934382 | 0.0031   | 0.009719 | 0.003402 | 0.103238   | 0                  |
| Orange | 2024          | LDT1             | Aggregate  | 10    | Diesel | 2.452   | 2.451534737 |      | 0 1.134872782 | 0.679045728 | 0.709749163 | 882.5310668 | 0.039626859 | 0.139043129 | 0.853142942 | 0.971246518 | 3.402159934 | 0.00836243  | 0.0031   | 0.012092 | 0.004232 | 0.086902   | 0                  |
| Orange | 2024          | LDT1             | Aggregate  | 15    | Diesel | 4.422   | 4.422415684 |      | 0 1.192611471 | 0.494692363 | 0.517060157 | 731.763703  | 0.02881713  | 0.115289669 | 0.620415846 | 0.706302193 | 2.535578249 | 0.006933833 | 0.0031   | 0.014477 | 0.005067 | 0.072056   | 0                  |
| Orange | 2024          | LDT2             | Aggregate  | 5     | Diesel | 14.79   | 14.79391169 |      | 0 0.157521089 | 0.011942297 | 0.012482275 | 778.4710481 | 0.012310415 | 0.122648431 | 0.265035988 | 0.301725852 | 2.638256309 | 0.007376409 | 0.0031   | 0.008098 | 0.002834 | 0.076655   | 0                  |
| Orange | 2024          | LDT2             | Aggregate  | 10    | Diesel | 440.6   | 440.6271365 |      | 0 0.132473759 | 0.010415475 | 0.010886416 | 655.2908699 | 0.009204581 | 0.103241343 | 0.19816922  | 0.225602482 | 1.974061168 | 0.006209214 | 0.0031   | 0.010075 | 0.003526 | 0.064526   | 0                  |
| Orange | 2024          | LDT2             | Aggregate  | 15    | Diesel | 794.9   | 794.8638582 |      | 0 0.091911966 | 0.008751748 | 0.009147464 | 543.3441286 | 0.004529211 | 0.085604089 | 0.097511243 | 0.111010067 | 0.968323679 | 0.005148462 | 0.0031   | 0.012062 | 0.004222 | 0.053503   | 0                  |
| Orange | 2024          | LHDT1            | Aggregate  | 5     | Diesel | 42.36   | 42.3636054  |      | 0 1.73073739  | 0.071700974 | 0.074942974 | 1172.472455 | 0.015605208 | 0.184723513 | 0.335970931 | 0.382480568 | 1.044870015 | 0.011109772 | 0.181225 | 0.078    | 0.0273   | 0.115452   | 0                  |
| Orange | 2024          | LHDT1            | Aggregate  | 10    | Diesel | 2198    | 2198.01993  |      | 0 1.583065522 | 0.059091029 | 0.061762863 | 1018.343047 | 0.013007408 | 0.160440362 | 0.28004184  | 0.318809017 | 0.839737919 | 0.009649318 | 0.181225 | 0.078    | 0.0273   | 0.100275   | 0                  |
| Orange | 2024          | LHDT1            | Aggregate  | 15    | Diesel | 3330    | 3329.852818 |      | 0 1.456493196 | 0.048925698 | 0.051137901 | 867.0508094 | 0.010942901 | 0.136604208 | 0.235594223 | 0.268208359 | 0.677499868 | 0.008215747 | 0.181225 | 0.078    | 0.0273   | 0.085378   | 0                  |
| Orange | 2024          | LHDT2            | Aggregate  | 5     | Diesel | 17.99   | 17.98662519 |      | 0 1.595954702 | 0.065432078 | 0.068390626 | 1382.677752 | 0.014247678 | 0.217841443 | 0.306744129 | 0.349207797 | 0.937108167 | 0.013101574 | 0.189629 | 0.091    | 0.03185  | 0.136151   | 0                  |
| Orange | 2024          | LHDT2            | Aggregate  | 10    | Diesel | 933.2   | 933.2293668 |      | 0 1.432282128 | 0.054404186 | 0.056864102 | 1205.516471 | 0.012093149 | 0.189929611 | 0.260358388 | 0.296400715 | 0.762056123 | 0.011422881 | 0.189629 | 0.091    | 0.03185  | 0.118706   | 0                  |
| Orange | 2024          | LHDT2            | Aggregate  | 15    | Diesel | 1414    | 1413.779918 |      | 0 1.290574943 | 0.04537098  | 0.047422454 | 1034.85181  | 0.010325833 | 0.163041324 | 0.222309102 | 0.253084132 | 0.619063676 | 0.009805747 | 0.189629 | 0.091    | 0.03185  | 0.101901   | 0                  |
| Orange | 2024          | MHDT             | Aggregate  | 5     | Diesel | 698.1   | 698.1373472 |      | 0 3.171767012 | 0.031208209 | 0.032619305 | 2419.031911 | 0.008136468 | 0.381119463 | 0.175175935 | 0.199424468 | 0.460485916 | 0.022906786 | 0.215913 | 0.061496 | 0.021524 | 0.2382     | 0                  |
| Orange | 2024          | MHDT             | Aggregate  | 10    | Diesel | 4900    | 4900.246834 |      | 0 2.395128665 | 0.025484744 | 0.026637051 | 2001.65685  | 0.005502476 | 0.315361852 | 0.118466804 | 0.134865439 | 0.323610476 | 0.018954493 | 0.215976 | 0.061496 | 0.021524 | 0.197101   | 0                  |
| Orange | 2024          | MHDT             | Aggregate  | 15    | Diesel | 9494    | 9494.246431 |      | 0 1.66552519  | 0.016469953 | 0.017214651 | 1573.872479 | 0.002740137 | 0.24796425  | 0.0589944   | 0.067160634 | 0.203713018 | 0.014903631 | 0.215886 | 0.061496 | 0.021524 | 0.154978   | 0                  |

| Region | Calendar Year | Vehicle Category | Model Year | Speed     | Fuel     | Population  | Total VMT   | CVMT        | Diesel %     | Trips       | PM2.5_RUNEX | PM10_RUNEX      | TOG_RUNEX   | TOG_RUNLOSS |
|--------|---------------|------------------|------------|-----------|----------|-------------|-------------|-------------|--------------|-------------|-------------|-----------------|-------------|-------------|
| Orange | 2024          | LDA              | Aggregate  | Aggregate | Gasoline | 1065891.765 | 42285386.13 | 42285386.13 | 0%           | 4977599.192 | 0.001238971 | 0.001347494     | 0.012635149 | 0.216703034 |
| Orange | 2024          | LDA              | Aggregate  | Aggregate | Diesel   | 3266.416655 | 98494.14462 | 98494.14462 | 53%          | 13787.61952 | 0.014560462 | 0.015218821     | 0.029648695 | 0           |
|        |               |                  |            |           |          |             | 42383880.27 | 63.0%       |              |             |             |                 |             |             |
| Orange | 2024          | LDT1             | Aggregate  | Aggregate | Gasoline | 97776.1357  | 3495530.367 | 3495530.367 | 0%           | 434581.8932 | 0.001857228 | 0.002019869     | 0.043880452 | 0.50051606  |
| Orange | 2024          | LDT1             | Aggregate  | Aggregate | Diesel   | 31.55516109 | 483.8937201 | 483.8937201 | 0.3%         | 89.92548515 | 0.241473199 | 0.252391545     | 0.343893248 | 0           |
| Orange | 2024          | LDT2             | Aggregate  | Aggregate | Gasoline | 523220.8345 | 21321177.46 | 21321177.46 | 0%           | 2459651.448 | 0.001279625 | 0.001391706     | 0.016130753 | 0.205116725 |
| Orange | 2024          | LDT2             | Aggregate  | Aggregate | Diesel   | 2063.415332 | 86972.74449 | 86972.74449 | 47%          | 9872.064019 | 0.004680094 | 0.004891707     | 0.016809854 | 0           |
|        |               |                  |            |           |          |             | 24904164.46 | 37.0%       | 185951       |             |             | Gasoline Avg EF | 0.024215451 | 0.307445273 |
|        |               |                  |            |           |          |             |             |             | Diesel Wt EF | 0.011005819 |             |                 |             |             |
| Region | Calendar Year | Vehicle Category | Model Year | Speed     | Fuel     | Population  | Total VMT   | CVMT        | Trips        | PM2.5_RUNEX | PM2.5_IDLEX | PM10_RUNEX      | PM10_IDLEX  |             |
| Orange | 2024          | HHDT             | Aggregate  | Aggregate | Diesel   | 11093.50859 | 1265161.083 | 1265161.083 | 156385.1844  | 0.023976022 | 0.031373962 | 0.025060112     | 0.032792553 |             |
| Orange | 2024          | MHDT             | Aggregate  | Aggregate | Diesel   | 27477.47253 | 1155908.692 | 1155908.692 | 346710.1335  | 0.009152304 | 0.017399215 | 0.00956613      | 0.01818593  |             |
| Orange | 2024          | LHDT1            | Aggregate  | Aggregate | Diesel   | 21602.56979 | 922158.8233 | 922158.8233 | 271733.1519  | 0.020207054 | 0.026412991 | 0.021120727     | 0.027607269 |             |
| Orange | 2024          | LHDT2            | Aggregate  | Aggregate | Diesel   | 9173.234432 | 391527.7031 | 391527.7031 | 115387.7492  | 0.018846093 | 0.026647053 | 0.01969823      | 0.027851915 |             |
|        |               |                  |            |           |          |             |             |             | Average      | 0.019526574 | 0.026530022 | 0.020409479     | 0.027729592 |             |



## **B-3**

# **ENERGY CALCULATIONS**

**This page intentionally left blank**

Increase in Operations at Prima Deshecha Landfill

**Proposed Project Operational Equipment Fuel Consumption**

| Equipment                       | Quantity | Hours Per Day | Days Per Year | Horsepower | Load Factor | Diesel Consumption (gallons/year) |
|---------------------------------|----------|---------------|---------------|------------|-------------|-----------------------------------|
| <b>Off-Road Equipment</b>       |          |               |               |            |             |                                   |
| Track-Type Tractor              | 4        | 10            | 307           | 460        | 0.37        | 141,917.4                         |
| Track-Type Tractor              | 1        | 10            | 307           | 251        | 0.37        | 19,359.4                          |
| Track-Type Tractor              | 1        | 10            | 307           | 110        | 0.37        | 8,484.2                           |
| Wheel Dozer w/BG                | 2        | 10            | 307           | 354        | 0.4         | 59,035.0                          |
| Compactor                       | 2        | 10            | 307           | 582        | 0.43        | 104,336.8                         |
| Scraper Front                   | 3        | 10            | 307           | 500        | 0.48        | 150,088.9                         |
| Scraper Rear                    | 3        | 10            | 307           | 283        | 0.48        | 84,950.3                          |
| Motor Grader                    | 1        | 10            | 307           | 253        | 0.41        | 21,623.2                          |
| Backhoe Loader                  | 1        | 5             | 307           | 115.3      | 0.37        | 4,446.5                           |
| Integrated Tool Carrier         | 1        | 5             | 307           | 180        | 0.42        | 7,879.7                           |
| Skidsteer Loader                | 1        | 5             | 307           | 69         | 0.37        | 2,661.0                           |
| Wheel Loader                    | 1        | 10            | 307           | 182.2      | 0.36        | 13,673.1                          |
| Wheel Loader                    | 1        | 10            | 307           | 300        | 0.36        | 22,513.3                          |
| Water Truck                     | 3        | 10            | 307           | 370        | 0.38        | 87,927.1                          |
| Telehandler                     | 1        | 5             | 307           | 73.7       | 0.42        | 3,226.3                           |
| Automatic Tarping Machine       | 2        | 5             | 307           | 50         | 0.4         | 4,169.1                           |
| <b>Total Off-Road Equipment</b> |          |               |               |            |             | <b>736,291.2</b>                  |

| Proposed Project Operational Vehicle Trips |          |                     |                               |
|--------------------------------------------|----------|---------------------|-------------------------------|
| Vehicle Class                              | CalEEMod | Total Project Trips | Total Trips per Vehicle Class |
| LDA                                        | 50.00%   | 70                  | 35.0                          |
| LDT1                                       | 25.00%   | 70                  | 17.5                          |
| LDT2                                       | 25.00%   | 70                  | 17.5                          |

| Proposed Project Operational Truck Trips |          |                     |                               |
|------------------------------------------|----------|---------------------|-------------------------------|
| Vehicle Class                            | CalEEMod | Total Project Trips | Total Trips per Vehicle Class |
| HHDT                                     | 100.00%  | 2,971               | 2,971.0                       |

| Proposed Project Operational Trips – Fuel Efficiency |               |                                |                                 |                 |                                             |
|------------------------------------------------------|---------------|--------------------------------|---------------------------------|-----------------|---------------------------------------------|
| Fuel                                                 | Vehicle Class | EMFAC2021 Outputs <sup>1</sup> |                                 |                 |                                             |
|                                                      |               | Fleet Mix (%) <sup>2</sup>     | Consumption (1,000 gallons/day) | VMT (miles/day) | Fuel Efficiency <sup>3</sup> (miles/gallon) |
| Gas                                                  | LDA           | 63%                            | 1408.4                          | 42,285,386.1    | 30.0                                        |
|                                                      | LDT1          | 5%                             | 139.0                           | 3,495,530.4     | 25.2                                        |
|                                                      | LDT2          | 32%                            | 872.9                           | 21,321,177.5    | 24.4                                        |
|                                                      | HHDT          | 100%                           | 202.3                           | 1,220,548.3     | 6.0                                         |

Notes:

<sup>1</sup> EMFAC2021 was run for Orange County for the year 2024. Data was aggregated over all vehicle model years and speed bins.<sup>2</sup> Fleet mix is based on assumptions made in CalEEMod for the proposed project.<sup>3</sup> The fuel efficiency was calculated by dividing the VMT (miles/day) by the fuel consumption (gallons/day).

| Proposed Project Operational Trips – Fuel Usage |                                            |                         |                                   |                               |                                                  |                            |
|-------------------------------------------------|--------------------------------------------|-------------------------|-----------------------------------|-------------------------------|--------------------------------------------------|----------------------------|
| Land Use                                        | Total Annual VMT <sup>2</sup> (miles/year) | Vehicle Class/Fuel Type | Portion of Fleet <sup>3</sup> (%) | VMT by Fuel Type (miles/year) | Fleet Mix Efficiency <sup>4</sup> (miles/gallon) | Fuel Usage (gallons/ year) |
| Other Asphalt Surfaces                          | 316,746.00                                 | LDA/Gas                 | 50%                               | 158,373.0                     | 30.0                                             | 5,279.1                    |
|                                                 |                                            | LDT1/Gas                | 25%                               | 79,186.5                      | 25.2                                             | 3,142.3                    |
|                                                 |                                            | LDT2/Gas                | 25%                               | 79,186.5                      | 24.4                                             | 3,245.3                    |
|                                                 | 37,187,451.00                              | Diesel                  | 100%                              | 37,187,451.0                  | 6.0                                              | 6,197,908.5                |
|                                                 |                                            |                         |                                   |                               | Total Gasoline/year                              | 11,666.8                   |
|                                                 |                                            |                         |                                   |                               | Total Diesel/year                                | 6,197,908.5                |

Notes:

<sup>1</sup> Calculated for year 2024 only. Future years will likely use less fuel due to more efficient cars.<sup>2</sup> Total VMT is based on project's trip generation and trip lengths.<sup>3</sup> Fleet distribution is based on EMFAC2021 output and CalEEMod assumptions.<sup>4</sup> Fuel efficiency is based on fuel consumption and VMT data from EMFAC2021 for Orange County and total VMT.