

## Criteria Temporal Summary - Mitigated

| Month                                       | Activity                                 | Mitigated  |             |                 |                  |                   |
|---|--|------------|-------------|-----------------|------------------|-------------------|
|   |  | ROG        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| #6  | Grading/Roads/Earthwork                  | 1.44       | 28.28       | 18.87           | 44.75            | 5.59              |
|   | <b>Month 6 Totals</b>                    | <b>1.4</b> | <b>28.3</b> | <b>18.9</b>     | <b>44.7</b>      | <b>5.6</b>        |
| #7  | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | <b>Month 7 Totals</b>                    | <b>2.0</b> | <b>39.4</b> | <b>23.5</b>     | <b>78.1</b>      | <b>9.2</b>        |
| #8  | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | <b>Month 8 Totals</b>                    | <b>2.0</b> | <b>39.4</b> | <b>23.5</b>     | <b>78.1</b>      | <b>9.2</b>        |
| #9  | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | <b>Month 9 Totals</b>                    | <b>2.0</b> | <b>39.4</b> | <b>23.5</b>     | <b>78.1</b>      | <b>9.2</b>        |
| #10   | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | Substation and O&M Building Construction | 0.49       | 7.91        | 8.24            | 9.52             | 1.28              |
|   | Paving                                   | 0.23       | 4.02        | 3.85            | 4.08             | 0.61              |
|   | <b>Month 10 Totals</b>                   | <b>2.7</b> | <b>51.3</b> | <b>35.6</b>     | <b>91.7</b>      | <b>11.1</b>       |
| #11   | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | Substation and O&M Building Construction | 0.49       | 7.91        | 8.24            | 9.52             | 1.28              |
|   | <b>Month 11 Totals</b>                   | <b>2.5</b> | <b>47.3</b> | <b>31.7</b>     | <b>87.6</b>      | <b>10.5</b>       |
| #12   | Solar Panel Construction                 | 1.99       | 39.40       | 23.46           | 78.06            | 9.24              |
|   | Offsite Transmission Facilities          | 0.92       | 8.17        | 7.03            | 8.09             | 1.25              |
|   | <b>Month 12 Totals</b>                   | <b>2.9</b> | <b>47.6</b> | <b>30.5</b>     | <b>86.2</b>      | <b>10.5</b>       |
| <b><i>Iris Solar Farm Maximum Daily</i></b> |  | <b>2.9</b> | <b>51.3</b> | <b>35.6</b>     | <b>91.7</b>      | <b>11.1</b>       |
| <i>Thresholds</i>                           |  | 75         | 550         | 100             | 150              | N/A               |
| <i>Exceeds?</i>                             |  | N          | N           | N               | N                |                   |

## Criteria Temporal Summary - Unmitigated

| Month                                       | Activity                                 | Mitigated  |             |                 |                  |                   |
|---|--|------------|-------------|-----------------|------------------|-------------------|
|   |  | ROG        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| #6  | Grading/Roads/Earthwork                  | 3.53       | 28.28       | 24.91           | 101.66           | 12.21             |
|   | <b>Month 6 Totals</b>                    | <b>3.5</b> | <b>28.3</b> | <b>24.9</b>     | <b>101.7</b>     | <b>12.2</b>       |
| #7  | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | <b>Month 7 Totals</b>                    | <b>3.7</b> | <b>39.4</b> | <b>28.5</b>     | <b>180.3</b>     | <b>20.7</b>       |
| #8  | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | <b>Month 8 Totals</b>                    | <b>3.7</b> | <b>39.4</b> | <b>28.5</b>     | <b>180.3</b>     | <b>20.7</b>       |
| #9  | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | <b>Month 9 Totals</b>                    | <b>3.7</b> | <b>39.4</b> | <b>28.5</b>     | <b>180.3</b>     | <b>20.7</b>       |
| #10   | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | Substation and O&M Building Construction | 1.43       | 7.91        | 11.69           | 21.94            | 2.84              |
|   | Paving                                   | 0.63       | 4.02        | 5.03            | 9.30             | 1.25              |
|   | <b>Month 10 Totals</b>                   | <b>5.7</b> | <b>51.3</b> | <b>45.2</b>     | <b>211.6</b>     | <b>24.8</b>       |
| #11   | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | Substation and O&M Building Construction | 1.43       | 7.91        | 11.69           | 21.94            | 2.84              |
|   | <b>Month 11 Totals</b>                   | <b>5.1</b> | <b>47.3</b> | <b>40.2</b>     | <b>202.3</b>     | <b>23.5</b>       |
| #12   | Solar Panel Construction                 | 3.69       | 39.40       | 28.48           | 180.34           | 20.69             |
|   | Offsite Transmission Facilities          | 1.53       | 8.17        | 8.66            | 18.38            | 2.51              |
|   | <b>Month 12 Totals</b>                   | <b>5.2</b> | <b>47.6</b> | <b>37.1</b>     | <b>198.7</b>     | <b>23.2</b>       |
| <b><i>Iris Solar Farm Maximum Daily</i></b> |  | <b>5.7</b> | <b>51.3</b> | <b>45.2</b>     | <b>211.6</b>     | <b>24.8</b>       |
| <i>Thresholds</i>                           |  | 75         | 550         | 100             | 150              | N/A               |
| <i>Exceeds?</i>                             |  | N          | N           | N               | Y                |                   |

## Operational Emissions

### Vehicle Activity

| Activity      | Vehicle Type                    | Workdays per Year | Trips per day | Round Trip (mi) | VMT per day | Annual VMT (mi) |
|---------------|---------------------------------|-------------------|---------------|-----------------|-------------|-----------------|
| On-site       | Pickup Trucks LDT2              | 244               | 2.00          | 10              | 20          | 4,880           |
|               | Utility/Service Vehicles T6     | 244               | 0.25          | 10              | 3           | 610             |
|               | Water Truck T7                  | 244               | 0.33          | 10              | 3           | 805             |
| Off-site      | Worker Commute *                | 244               | 12.73         | 30              | 382         | 93,164          |
|               | Carpenter Service Vehicle LHD1  | 244               | 0.50          | 30              | 15          | 3,660           |
|               | Electrical Service Vehicle LHD1 | 244               | 0.50          | 30              | 15          | 3,660           |
|               | Equipment/Material Delivery MDV | 244               | 0.10          | 30              | 3           | 732             |
| <b>Totals</b> |                                 |                   |               |                 | <b>441</b>  | <b>107,511</b>  |

### Criteria Emissions

| Activity      | Vehicle Type                | Pounds per Day |              |                 |                  |                   |
|---------------|-----------------------------|----------------|--------------|-----------------|------------------|-------------------|
|               |                             | ROG            | CO           | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| On-site       | Pickup Trucks               | 0.004          | 0.127        | 0.017           | 0.002            | 0.001             |
|               | Utility/Service Vehicles    | 0.000          | 0.016        | 0.002           | 0.000            | 0.000             |
|               | Water Truck                 | 0.001          | 0.021        | 0.003           | 0.000            | 0.000             |
|               | <b>Activity Type Total</b>  | <b>0.005</b>   | <b>0.163</b> | <b>0.022</b>    | <b>0.003</b>     | <b>0.001</b>      |
| Off-site      | Worker Commute              | 0.073          | 2.418        | 0.319           | 0.039            | 0.016             |
|               | Carpenter Service Vehicle   | 0.003          | 0.095        | 0.013           | 0.002            | 0.001             |
|               | Electrical Service Vehicle  | 0.003          | 0.095        | 0.013           | 0.002            | 0.001             |
|               | Equipment/Material Delivery | 0.001          | 0.019        | 0.003           | 0.000            | 0.000             |
|               | <b>Activity Type Total</b>  | <b>0.080</b>   | <b>2.626</b> | <b>0.347</b>    | <b>0.043</b>     | <b>0.018</b>      |
| <b>Totals</b> |                             | <b>0.08</b>    | <b>2.79</b>  | <b>0.37</b>     | <b>0.05</b>      | <b>0.02</b>       |

### GHG Emissions

| Activity      | Vehicle Type                | Total Tonnes    |                 |                  |                   |
|---------------|-----------------------------|-----------------|-----------------|------------------|-------------------|
|               |                             | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| On-site       | Pickup Trucks               | 1.99            | 0.0002          | 0.0002           | 2.06              |
|               | Utility/Service Vehicles    | 0.63            | 0.0004          | 0.0003           | 0.74              |
|               | Water Truck                 | 1.29            | 0.0005          | 0.0004           | 1.43              |
| Off-site      | Worker Commute              | 29.83           | 0.0027          | 0.0032           | 30.87             |
|               | Carpenter Service Vehicle   | 2.06            | 0.0001          | 0.0002           | 2.11              |
|               | Electrical Service Vehicle  | 2.06            | 0.0001          | 0.0002           | 2.11              |
|               | Equipment/Material Delivery | 0.39            | 0.0000          | 0.0000           | 0.40              |
| <b>Totals</b> |                             | <b>38.2</b>     | <b>0.0040</b>   | <b>0.0045</b>    | <b>39.7</b>       |

\* Worker commute trips per day was estimated based on full-time employees plus occasional extra workers for PV cleaning

## Criteria Emissions Summary

### Unmitigated

| Phase Activity                           | Category                      | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|--|-------------------------------|----------------------------|------------|-----------------|------------------|-------------------|
|  |                               | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Grading/Roads/Earthwork                  | Off-road                      | 2.81                       | 11.79      | 20.87           | 1.26             | 1.26              |
|  | On-site Mobile                | 0.01                       | 0.04       | 0.22            | 0.02             | 0.01              |
|  | Vendors                       | 0.04                       | 0.16       | 1.73            | 0.04             | 0.03              |
|  | Employees                     | 0.67                       | 16.29      | 2.08            | 0.23             | 0.10              |
|  | Road Dust                     | --                         | --         | --              | 98.91            | 10.68             |
|  | Grading Fugitive              | --                         | --         | --              | 1.20             | 0.13              |
|  | <b>Phase 1 Activity Total</b> |                            | <b>3.5</b> | <b>28.3</b>     | <b>24.9</b>      | <b>101.7</b>      |
| Solar Panel Construction                 | Off-road                      | 2.30                       | 9.08       | 16.66           | 1.06             | 1.06              |
|  | On-site Mobile                | 0.01                       | 0.06       | 0.38            | 0.03             | 0.02              |
|  | Vendors                       | 0.16                       | 0.68       | 7.66            | 0.19             | 0.14              |
|  | Employees                     | 1.22                       | 29.57      | 3.77            | 0.43             | 0.18              |
|  | Road Dust                     | --                         | --         | --              | 178.63           | 19.29             |
|  | <b>Phase 2 Activity Total</b> |                            | <b>3.7</b> | <b>39.4</b>     | <b>28.5</b>      | <b>180.3</b>      |
| Substation and O&M Building Construction | Off-road                      | 1.26                       | 4.36       | 10.65           | 0.48             | 0.48              |
|  | On-site Mobile                | 0.01                       | 0.04       | 0.22            | 0.02             | 0.01              |
|  | Vendors                       | 0.01                       | 0.06       | 0.38            | 0.02             | 0.02              |
|  | Employees                     | 0.14                       | 3.46       | 0.44            | 0.05             | 0.02              |
|  | Road Dust                     | --                         | --         | --              | 21.37            | 2.31              |
|  | <b>Phase 3 Activity Total</b> |                            | <b>1.4</b> | <b>7.9</b>      | <b>11.7</b>      | <b>21.9</b>       |
| Offsite Transmission Facilities          | Off-road                      | 1.38                       | 5.10       | 7.65            | 0.55             | 0.55              |
|  | Vendors                       | 0.03                       | 0.11       | 0.64            | 0.03             | 0.03              |
|  | Employees                     | 0.12                       | 2.96       | 0.38            | 0.04             | 0.02              |
|  | Road Dust                     | --                         | --         | --              | 17.75            | 1.92              |
|  | <b>Phase 4 Activity Total</b> |                            | <b>1.5</b> | <b>8.2</b>      | <b>8.7</b>       | <b>18.4</b>       |
| Paving                                   | Off-road                      | 0.55                       | 2.46       | 3.97            | 0.25             | 0.25              |
|  | On-site Mobile                | 0.00                       | 0.02       | 0.09            | 0.01             | 0.00              |
|  | Vendors                       | 0.02                       | 0.07       | 0.77            | 0.02             | 0.01              |
|  | Employees                     | 0.06                       | 1.48       | 0.19            | 0.02             | 0.01              |
|  | Road Dust                     | --                         | --         | --              | 9.00             | 0.97              |
|  | <b>Phase 5 Activity Total</b> |                            | <b>0.6</b> | <b>4.0</b>      | <b>5.0</b>       | <b>9.3</b>        |

**Mitigated**

| Phase Activity                           | Category                      | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|--|-------------------------------|----------------------------|------------|-----------------|------------------|-------------------|
|  |                               | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Grading/Roads/Earthwork                  | Off-road                      | 0.73                       | 11.79      | 14.83           | 0.72             | 0.72              |
|  | On-site Mobile                | 0.01                       | 0.04       | 0.22            | 0.02             | 0.01              |
|  | Vendors                       | 0.04                       | 0.16       | 1.73            | 0.04             | 0.03              |
|  | Employees                     | 0.67                       | 16.29      | 2.08            | 0.23             | 0.10              |
|  | Road Dust                     | --                         | --         | --              | 42.53            | 4.59              |
|  | Grading Fugitive              | --                         | --         | --              | 1.20             | 0.13              |
|  | <b>Phase 1 Activity Total</b> |                            | <b>1.4</b> | <b>28.3</b>     | <b>18.9</b>      | <b>44.7</b>       |
| Solar Panel Construction                 | Off-road                      | 0.60                       | 9.08       | 11.65           | 0.61             | 0.61              |
|  | On-site Mobile                | 0.01                       | 0.06       | 0.38            | 0.03             | 0.02              |
|  | Vendors                       | 0.16                       | 0.68       | 7.66            | 0.19             | 0.14              |
|  | Employees                     | 1.22                       | 29.57      | 3.77            | 0.43             | 0.18              |
|  | Road Dust                     | --                         | --         | --              | 76.81            | 8.29              |
|  | <b>Phase 2 Activity Total</b> |                            | <b>2.0</b> | <b>39.4</b>     | <b>23.5</b>      | <b>78.1</b>       |
| Substation and O&M Building Construction | Off-road                      | 0.32                       | 4.36       | 7.20            | 0.24             | 0.24              |
|  | On-site Mobile                | 0.01                       | 0.04       | 0.22            | 0.02             | 0.01              |
|  | Vendors                       | 0.01                       | 0.06       | 0.38            | 0.02             | 0.02              |
|  | Employees                     | 0.14                       | 3.46       | 0.44            | 0.05             | 0.02              |
|  | Road Dust                     | --                         | --         | --              | 9.19             | 0.99              |
|  | <b>Phase 3 Activity Total</b> |                            | <b>0.5</b> | <b>7.9</b>      | <b>8.2</b>       | <b>9.5</b>        |
| Offsite Transmission Facilities          | Off-road                      | 0.77                       | 5.10       | 6.02            | 0.38             | 0.38              |
|  | Vendors                       | 0.03                       | 0.11       | 0.64            | 0.03             | 0.03              |
|  | Employees                     | 0.12                       | 2.96       | 0.38            | 0.04             | 0.02              |
|  | Road Dust                     | --                         | --         | --              | 7.63             | 0.82              |
|  | <b>Phase 4 Activity Total</b> |                            | <b>0.9</b> | <b>8.2</b>      | <b>7.0</b>       | <b>8.1</b>        |
| Paving                                   | Off-road                      | 0.15                       | 2.46       | 2.79            | 0.16             | 0.16              |
|  | On-site Mobile                | 0.00                       | 0.02       | 0.09            | 0.01             | 0.00              |
|  | Vendors                       | 0.02                       | 0.07       | 0.77            | 0.02             | 0.01              |
|  | Employees                     | 0.06                       | 1.48       | 0.19            | 0.02             | 0.01              |
|  | Road Dust                     | --                         | --         | --              | 3.87             | 0.42              |
|  | <b>Phase 5 Activity Total</b> |                            | <b>0.2</b> | <b>4.0</b>      | <b>3.8</b>       | <b>4.1</b>        |

## GHG Emissions Summary

| Phase Activity                           | Category                    | GHG Emissions (tonnes) |                 |                  |                   |
|--|-----------------------------|------------------------|-----------------|------------------|-------------------|
|  |                             | CO <sub>2</sub>        | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Grading/Roads/Earthwork                  | Off-road                    | 49.47                  | 0.0050          | N/A              | 49.58             |
|  | On-site Mobile              | 0.24                   | 0.0001          | 0.0001           | 0.24              |
|  | Vendors                     | 2.25                   | 0.0009          | 0.0008           | 2.52              |
|  | Employees                   | 15.78                  | 0.0298          | 0.0274           | 24.90             |
|  | <b>Phase Activity Total</b> | <b>67.7</b>            | <b>0.036</b>    | <b>0.028</b>     | <b>77.2</b>       |
| Solar Panel Construction                 | Off-road                    | 122.17                 | 0.0143          | N/A              | 122.47            |
|  | On-site Mobile              | 1.29                   | 0.0004          | 0.0004           | 1.31              |
|  | Vendors                     | 7.07                   | 0.0028          | 0.0026           | 7.92              |
|  | Employees                   | 151.83                 | 0.2863          | 0.2634           | 239.49            |
|  | <b>Phase Activity Total</b> | <b>282.4</b>           | <b>0.304</b>    | <b>0.266</b>     | <b>371.2</b>      |
| Substation and O&M Building Construction | Off-road                    | 30.31                  | 0.0025          | N/A              | 30.37             |
|  | On-site Mobile              | 0.18                   | 0.0000          | 0.0000           | 0.18              |
|  | Vendors                     | 1.49                   | 0.0007          | 0.0006           | 1.69              |
|  | Employees                   | 6.70                   | 0.0126          | 0.0116           | 10.56             |
|  | <b>Phase Activity Total</b> | <b>38.7</b>            | <b>0.016</b>    | <b>0.012</b>     | <b>42.8</b>       |
| Offsite Transmission Facilities          | Off-road                    | 7.94                   | 0.0012          | N/A              | 7.97              |
|  | Vendors                     | 0.81                   | 0.0003          | 0.0003           | 0.91              |
|  | Employees                   | 2.87                   | 0.0054          | 0.0050           | 4.53              |
|  | <b>Phase Activity Total</b> | <b>11.6</b>            | <b>0.007</b>    | <b>0.005</b>     | <b>13.4</b>       |
| Paving                                   | Off-road                    | 1.93                   | 0.0002          | N/A              | 1.93              |
|  | On-site Mobile              | 0.01                   | 0.0000          | 0.0000           | 0.01              |
|  | Vendors                     | 0.52                   | 0.0002          | 0.0002           | 0.58              |
|  | Employees                   | 0.72                   | 0.0014          | 0.0012           | 1.13              |
|  | <b>Phase Activity Total</b> | <b>3.2</b>             | <b>0.002</b>    | <b>0.001</b>     | <b>3.7</b>        |
| <b>Grand Total for ISF Site</b>          |                             | <b>403.6</b>           | <b>0.364</b>    | <b>0.314</b>     | <b>508.3</b>      |

# Employee Commute

## Vehicle Activity

| Activity                                 | Total Trips (days) | Trips per day | Round Trip (mi) | VMT per day  | Total VMT (mi) |
|--|--------------------|---------------|-----------------|--------------|----------------|
| Grading/Roads/Earthwork                  | 22                 | 76            | 30              | 2,269        | 49,295         |
| Solar Panel Construction                 | 115                | 137           | 30              | 4,118        | 474,204        |
| Substation and O&M Building Construction | 43                 | 16            | 30              | 481          | 20,913         |
| Offsite Transmission Facilities          | 22                 | 14            | 30              | 413          | 8,963          |
| Paving                                   | 11                 | 7             | 30              | 206          | 2,241          |
| <b>Totals</b>                            |                    |               |                 | <b>7,487</b> | <b>555,615</b> |

## Criteria Emissions

| Activity                                 | Pounds per Day |             |                 |                  |                   |             |
|--|----------------|-------------|-----------------|------------------|-------------------|-------------|
|  | ROG            | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |             |
| Grading/Roads/Earthwork                  | 0.670          | 16.291      | 2.079           | 0.235            | 0.099             |             |
| Solar Panel Construction                 | 1.217          | 29.570      | 3.773           | 0.426            | 0.179             |             |
| Substation and O&M Building Construction | 0.142          | 3.456       | 0.441           | 0.050            | 0.021             |             |
| Offsite Transmission Facilities          | 0.122          | 2.962       | 0.378           | 0.043            | 0.018             |             |
| Paving                                   | 0.061          | 1.481       | 0.189           | 0.021            | 0.009             |             |
| <b>Totals</b>                            |                | <b>2.21</b> | <b>53.76</b>    | <b>6.86</b>      | <b>0.77</b>       | <b>0.33</b> |

## GHG Emissions

| Activity                                 | Total Tonnes    |                 |                  |                   |              |
|--|-----------------|-----------------|------------------|-------------------|--------------|
|  | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |              |
| Grading/Roads/Earthwork                  | 15.78           | 0.0298          | 0.0274           | 24.90             |              |
| Solar Panel Construction                 | 151.83          | 0.2863          | 0.2634           | 239.49            |              |
| Substation and O&M Building Construction | 6.70            | 0.0126          | 0.0116           | 10.56             |              |
| Offsite Transmission Facilities          | 2.87            | 0.0054          | 0.0050           | 4.53              |              |
| Paving                                   | 0.72            | 0.0014          | 0.0012           | 1.13              |              |
| <b>Totals</b>                            |                 | <b>177.9</b>    | <b>0.3354</b>    | <b>0.3086</b>     | <b>280.6</b> |

## On-site Mobile Equipment Emissions

### Grading/Roads/Earthwork

| Vehicle                 | Type | # Days | VMT per Day | Avg Number | Total VMT  | Criteria Emissions (lbs/d) |             |                 |                  |                   | GHG Emissions (tonnes) |                 |                  |                   |
|-------------------------|------|--------|-------------|------------|------------|----------------------------|-------------|-----------------|------------------|-------------------|------------------------|-----------------|------------------|-------------------|
|                         |      |        |             |            |            | ROG                        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | CO <sub>2</sub>        | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Water Trucks            | T6   | 22     | 5.45        | 0.82       | 97         | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.110                  | 0.0001          | 0.0001           | 0.11              |
| Pick Up Trucks          | LDT2 | 22     | 5.45        | 1.36       | 162        | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.073                  | 0.0000          | 0.0000           | 0.07              |
| Flatbed Delivery Trucks | MDV  | 22     | 5.45        | 0.27       | 32         | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.019                  | 0.0000          | 0.0000           | 0.02              |
| Lube/Fuel Trucks        | T6   | 22     | 2.73        | 0.55       | 32         | 0.001                      | 0.005       | 0.032           | 0.002            | 0.002             | 0.037                  | 0.0000          | 0.0000           | 0.04              |
| <b>Totals</b>           |      |        |             |            | <b>323</b> | <b>0.01</b>                | <b>0.04</b> | <b>0.22</b>     | <b>0.02</b>      | <b>0.01</b>       | <b>0.24</b>            | <b>0.000</b>    | <b>0.000</b>     | <b>0.24</b>       |

### Solar Panel Construction

| Vehicle                 | Type | # Days | VMT per Day | Avg Number | Total VMT    | Criteria Emissions (lbs/d) |             |                 |                  |                   | GHG Emissions (tonnes) |                 |                  |                   |
|-------------------------|------|--------|-------------|------------|--------------|----------------------------|-------------|-----------------|------------------|-------------------|------------------------|-----------------|------------------|-------------------|
|                         |      |        |             |            |              | ROG                        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | CO <sub>2</sub>        | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Water Trucks            | T6   | 115    | 5.45        | 0.18       | 111          | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.126                  | 0.000           | 0.000            | 0.13              |
| Concrete Trucks         | T6   | 115    | 5.45        | 0.11       | 71           | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.080                  | 0.000           | 0.000            | 0.08              |
| Pick Up Trucks          | LDT2 | 115    | 5.45        | 1.36       | 856          | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.386                  | 0.000           | 0.000            | 0.39              |
| Flatbed Delivery Trucks | MDV  | 115    | 5.45        | 0.55       | 343          | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.201                  | 0.000           | 0.000            | 0.20              |
| Service Trucks          | LHD1 | 115    | 2.73        | 0.55       | 171          | 0.001                      | 0.005       | 0.032           | 0.002            | 0.002             | 0.106                  | 0.000           | 0.000            | 0.11              |
| Dump Trucks             | T6   | 115    | 5.45        | 0.27       | 171          | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.195                  | 0.000           | 0.000            | 0.20              |
| Lube/Fuel Trucks        | T6   | 115    | 2.73        | 0.55       | 171          | 0.001                      | 0.005       | 0.032           | 0.002            | 0.002             | 0.195                  | 0.000           | 0.000            | 0.20              |
| <b>Totals</b>           |      |        |             |            | <b>1,894</b> | <b>0.01</b>                | <b>0.06</b> | <b>0.38</b>     | <b>0.03</b>      | <b>0.02</b>       | <b>1.29</b>            | <b>0.000</b>    | <b>0.000</b>     | <b>1.31</b>       |



## Substation and O&M Building Construction

| Vehicle                 | Type | # Days | VMT per Day | Avg Number | Total VMT  | Criteria Emissions (lbs/d) |             |                 |                  |                   | GHG Emissions (tonnes) |                 |                  |                   |
|-------------------------|------|--------|-------------|------------|------------|----------------------------|-------------|-----------------|------------------|-------------------|------------------------|-----------------|------------------|-------------------|
|                         |      |        |             |            |            | ROG                        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | CO <sub>2</sub>        | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Pick Up Trucks          | LDT2 | 43     | 5.45        | 0.82       | 194        | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.087                  | 0.0000          | 0.0000           | 0.09              |
| Flatbed Delivery Trucks | MDV  | 43     | 5.45        | 0.27       | 65         | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.038                  | 0.0000          | 0.0000           | 0.04              |
| Service Trucks          | LHD1 | 43     | 2.73        | 0.45       | 54         | 0.001                      | 0.005       | 0.032           | 0.002            | 0.002             | 0.033                  | 0.0000          | 0.0000           | 0.03              |
| Concrete Trucks         | T6   | 43     | 5.45        | 0.09       | 22         | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.024                  | 0.0000          | 0.0000           | 0.03              |
| <b>Totals</b>           |      |        |             |            | <b>334</b> | <b>0.01</b>                | <b>0.04</b> | <b>0.22</b>     | <b>0.02</b>      | <b>0.01</b>       | <b>0.18</b>            | <b>0.000</b>    | <b>0.000</b>     | <b>0.18</b>       |

## Paving

| Vehicle        | Type | # Days | VMT per Day | Avg Number | Total VMT | Criteria Emissions (lbs/d) |             |                 |                  |                   | GHG Emissions (tonnes) |                 |                  |                   |
|----------------|------|--------|-------------|------------|-----------|----------------------------|-------------|-----------------|------------------|-------------------|------------------------|-----------------|------------------|-------------------|
|                |      |        |             |            |           | ROG                        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | CO <sub>2</sub>        | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Pick Up Trucks | LDT2 | 11     | 5.45        | 0.18       | 11        | 0.002                      | 0.011       | 0.063           | 0.005            | 0.003             | 0.005                  | 0.0000          | 0.0000           | 0.00              |
| Service Trucks | LHD1 | 11     | 2.73        | 0.18       | 5         | 0.001                      | 0.005       | 0.032           | 0.002            | 0.002             | 0.003                  | 0.0000          | 0.0000           | 0.00              |
| <b>Totals</b>  |      |        |             |            | <b>16</b> | <b>0.00</b>                | <b>0.02</b> | <b>0.09</b>     | <b>0.01</b>      | <b>0.00</b>       | <b>0.01</b>            | <b>0.000</b>    | <b>0.000</b>     | <b>0.01</b>       |

*Note: Lbs/day emission estimates assume worst-case of all vehicles operating on the same day traveling full mileage*

## Vendor Off-site Activity

### Vehicle Activity

| Activity Phase                           | Vehicle Type (EMFAC)          | Days per Phase | Trips per day | Round Trip (mi) | VMT per day | Total VMT (mi) |
|--|-------------------------------|----------------|---------------|-----------------|-------------|----------------|
| Grading/Roads/Earthwork                  | Flatbed/Delivery Trucks (T7)  | 22             | 2.00          | 30              | 60          | 1,304          |
|  | Porto-Let Trucks (T6)         | 22             | 0.25          | 30              | 8           | 163            |
|  | <b>Activity Phase Total</b>   |                |               |                 | <b>68</b>   | <b>1,467</b>   |
| Solar Panel Construction                 | Flatbed/Delivery Trucks (T7)  | 115            | 1.18          | 30              | 35          | 4,062          |
|  | PV Panel Delivery Trucks (T7) | 115            | 3.51          | 70              | 246         | 28,292         |
|  | Concrete Trucks (T6)          | 115            | 0.41          | 30              | 12          | 1,423          |
|  | Porto-Let Trucks (T6)         | 115            | 0.16          | 30              | 5           | 560            |
|  | <b>Activity Phase Total</b>   |                |               |                 | <b>298</b>  | <b>34,337</b>  |
| Substation and O&M Building Construction | Concrete Trucks (T6)          | 43             | 0.33          | 30              | 10          | 434            |
|  | Porto-Let Trucks (T6)         | 43             | 0.25          | 30              | 8           | 326            |
|  | Flatbed/Delivery Trucks (T7)  | 43             | 0.50          | 30              | 15          | 652            |
|  | <b>Activity Phase Total</b>   |                |               |                 | <b>32</b>   | <b>1,412</b>   |
| Offsite Transmission Facilities          | Concrete Trucks (T6)          | 22             | 0.17          | 30              | 5           | 109            |
|  | Fuel & Lube Trucks (T7)       | 22             | 1.00          | 30              | 30          | 652            |
|  | Flatbed/Delivery Trucks (T7)  | 22             | 0.67          | 30              | 20          | 435            |
|  | <b>Activity Phase Total</b>   |                |               |                 | <b>55</b>   | <b>1,195</b>   |
| Paving                                   | Flatbed/Delivery Trucks (T7)  | 11             | 0.67          | 30              | 20          | 217            |
|  | Fuel & Lube Trucks (T7)       | 11             | 0.33          | 30              | 10          | 109            |
|  | <b>Activity Phase Total</b>   |                |               |                 | <b>30</b>   | <b>326</b>     |
| <b>Project Totals</b>                    |                               |                |               |                 | <b>483</b>  | <b>38,737</b>  |

### Criteria Emissions

| Activity Phase                           | Vehicle Type (EMFAC)          | Pounds per Day |             |                 |                  |                   |
|--|-------------------------------|----------------|-------------|-----------------|------------------|-------------------|
|  |                               | ROG            | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Grading/Roads/Earthwork                  | Flatbed/Delivery Trucks (T7)  | 0.031          | 0.138       | 1.542           | 0.038            | 0.028             |
|  | Porto-Let Trucks (T6)         | 0.004          | 0.017       | 0.193           | 0.005            | 0.003             |
|  | <b>Activity Phase Total</b>   |                | <b>0.04</b> | <b>0.16</b>     | <b>1.73</b>      | <b>0.04</b>       |
| Solar Panel Construction                 | Flatbed/Delivery Trucks (T7)  | 0.018          | 0.081       | 0.907           | 0.022            | 0.016             |
|  | PV Panel Delivery Trucks (T7) | 0.128          | 0.564       | 6.315           | 0.156            | 0.114             |
|  | Concrete Trucks (T6)          | 0.006          | 0.028       | 0.318           | 0.008            | 0.006             |
|  | Porto-Let Trucks (T6)         | 0.003          | 0.011       | 0.125           | 0.003            | 0.002             |
|  | <b>Activity Phase Total</b>   |                | <b>0.16</b> | <b>0.68</b>     | <b>7.66</b>      | <b>0.19</b>       |
| Substation and O&M Building Construction | Concrete Trucks (T6)          | 0.005          | 0.019       | 0.116           | 0.006            | 0.005             |
|  | Porto-Let Trucks (T6)         | 0.003          | 0.015       | 0.087           | 0.005            | 0.003             |
|  | Flatbed/Delivery Trucks (T7)  | 0.007          | 0.029       | 0.174           | 0.010            | 0.007             |
|  | <b>Activity Phase Total</b>   |                | <b>0.01</b> | <b>0.06</b>     | <b>0.38</b>      | <b>0.02</b>       |
| Offsite Transmission Facilities          | Concrete Trucks (T6)          | 0.002          | 0.010       | 0.058           | 0.003            | 0.002             |
|  | Fuel & Lube Trucks (T7)       | 0.014          | 0.058       | 0.348           | 0.019            | 0.014             |
|  | Flatbed/Delivery Trucks (T7)  | 0.009          | 0.039       | 0.232           | 0.013            | 0.009             |
|  | <b>Activity Phase Total</b>   |                | <b>0.03</b> | <b>0.11</b>     | <b>0.64</b>      | <b>0.03</b>       |
| Paving                                   | Flatbed/Delivery Trucks (T7)  | 0.010          | 0.046       | 0.514           | 0.013            | 0.009             |
|  | Fuel & Lube Trucks (T7)       | 0.005          | 0.023       | 0.257           | 0.006            | 0.005             |
|  | <b>Activity Phase Total</b>   |                | <b>0.02</b> | <b>0.07</b>     | <b>0.77</b>      | <b>0.02</b>       |
| <b>Project Totals</b>                    |                               | <b>0.25</b>    | <b>1.08</b> | <b>11.19</b>    | <b>0.31</b>      | <b>0.22</b>       |

**GHG Emissions**

| Activity Phase                           | Vehicle Type (EMFAC)          | Total Tonnes    |                 |                  |                   |
|--|-------------------------------|-----------------|-----------------|------------------|-------------------|
|  |                               | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e |
| Grading/Roads/Earthwork                  | Flatbed/Delivery Trucks (T7)  | 2.08            | 0.0008          | 0.0007           | 2.32              |
|  | Porto-Let Trucks (T6)         | 0.17            | 0.0001          | 0.0001           | 0.20              |
|  | <b>Activity Phase Total</b>   | <b>2.2</b>      | <b>0.0009</b>   | <b>0.0008</b>    | <b>2.5</b>        |
| Solar Panel Construction                 | Flatbed/Delivery Trucks (T7)  | 6.49            | 0.0025          | 0.0023           | 7.24              |
|  | PV Panel Delivery Trucks (T7) | 45.19           | 0.0171          | 0.0157           | 50.42             |
|  | Concrete Trucks (T6)          | 1.47            | 0.0009          | 0.0008           | 1.73              |
|  | Porto-Let Trucks (T6)         | 0.58            | 0.0003          | 0.0003           | 0.68              |
|  | <b>Activity Phase Total</b>   | <b>53.7</b>     | <b>0.0207</b>   | <b>0.0191</b>    | <b>60.1</b>       |
| Substation and O&M Building Construction | Concrete Trucks (T6)          | 0.45            | 0.0003          | 0.0002           | 0.53              |
|  | Porto-Let Trucks (T6)         | 0.34            | 0.0002          | 0.0002           | 0.40              |
|  | Flatbed/Delivery Trucks (T7)  | 1.04            | 0.0004          | 0.0004           | 1.16              |
|  | <b>Activity Phase Total</b>   | <b>1.8</b>      | <b>0.0009</b>   | <b>0.0008</b>    | <b>2.1</b>        |
| Offsite Transmission Facilities          | Concrete Trucks (T6)          | 0.11            | 0.0001          | 0.0001           | 0.13              |
|  | Fuel & Lube Trucks (T7)       | 1.04            | 0.0004          | 0.0004           | 1.16              |
|  | Flatbed/Delivery Trucks (T7)  | 0.69            | 0.0003          | 0.0002           | 0.77              |
|  | <b>Activity Phase Total</b>   | <b>1.8</b>      | <b>0.0007</b>   | <b>0.0007</b>    | <b>2.1</b>        |
| Paving                                   | Flatbed/Delivery Trucks (T7)  | 0.35            | 0.0001          | 0.0001           | 0.39              |
|  | Fuel & Lube Trucks (T7)       | 0.17            | 0.0001          | 0.0001           | 0.19              |
|  | <b>Activity Phase Total</b>   | <b>0.5</b>      | <b>0.0002</b>   | <b>0.0002</b>    | <b>0.6</b>        |
| <b>Totals</b>                            |                               | <b>60.2</b>     | <b>0.0234</b>   | <b>0.0215</b>    | <b>67.3</b>       |

## Off Road Equipment Emissions

### Grading/Roads/Earthwork

| Equipment Type       | Activity |             |                |         |                  |             | Criteria Emissions (lbs/d) |             |                 |                  |                   |
|----------------------|----------|-------------|----------------|---------|------------------|-------------|----------------------------|-------------|-----------------|------------------|-------------------|
|                      | BHP      | Load Factor | Length (wkday) | hrs/day | Avg Daily Number | total hours | ROG                        | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Crawler Tractors     | 185      | 0.43        | 22             | 8       | 1.0              | 174         | 0.80                       | 2.30        | 7.06            | 0.27             | 0.27              |
| Generator Sets       | 30       | 0.74        | 22             | 8       | 0.8              | 174         | 0.45                       | 1.47        | 1.58            | 0.12             | 0.12              |
| Scrapers             | 365      | 0.48        | 22             | 8       | 1.0              | 174         | 1.66                       | 6.20        | 14.28           | 0.55             | 0.55              |
| Rubber Tired Loaders | 78       | 0.36        | 22             | 8       | 2.0              | 174         | 0.86                       | 3.94        | 5.40            | 0.45             | 0.45              |
| Graders              | 185      | 0.41        | 22             | 8       | 1.0              | 174         | 0.62                       | 1.84        | 5.67            | 0.20             | 0.20              |
| Rollers              | 83       | 0.38        | 22             | 4       | 1.5              | 87          | 0.37                       | 1.62        | 2.37            | 0.20             | 0.20              |
| Pavers               | 173      | 0.42        | 22             | 4       | 2.0              | 87          | 0.96                       | 4.39        | 7.43            | 0.41             | 0.41              |
| <b>Totals</b>        |          |             |                |         |                  |             | <b>2.8</b>                 | <b>11.8</b> | <b>20.9</b>     | <b>1.3</b>       | <b>1.3</b>        |

### Solar Panel Construction

| Equipment Type              | Activity |             |                |         |                  |             | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|-----------------------------|----------|-------------|----------------|---------|------------------|-------------|----------------------------|------------|-----------------|------------------|-------------------|
|                             | BHP      | Load Factor | Length (wkday) | hrs/day | Avg Daily Number | total hours | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Generator Sets              | 30       | 0.74        | 115            | 8       | 1.0              | 921         | 0.56                       | 1.83       | 1.98            | 0.15             | 0.15              |
| Air Compressors             | 25       | 0.48        | 115            | 8       | 1.0              | 921         | 0.20                       | 0.59       | 1.06            | 0.06             | 0.06              |
| Crawler Tractors            | 185      | 0.43        | 115            | 4       | 1.0              | 461         | 0.40                       | 1.15       | 3.53            | 0.13             | 0.13              |
| Rubber Tired Loaders        | 78       | 0.36        | 115            | 4       | 1.0              | 461         | 0.22                       | 0.98       | 1.35            | 0.11             | 0.11              |
| Rubber Tired Forklifts      | 99       | 0.40        | 115            | 5       | 1.5              | 576         | 0.52                       | 2.56       | 3.34            | 0.28             | 0.28              |
| Trenchers                   | 115      | 0.50        | 115            | 4       | 1.5              | 461         | 0.81                       | 3.09       | 4.99            | 0.42             | 0.42              |
| Oher construction equipment | 310      | 0.42        | 115            | 4       | 1.0              | 461         | 0.35                       | 1.30       | 3.45            | 0.11             | 0.11              |
| <b>Totals</b>               |          |             |                |         |                  |             | <b>2.3</b>                 | <b>9.1</b> | <b>16.7</b>     | <b>1.1</b>       | <b>1.1</b>        |

## Substation and O&M Building Construction

| Equipment Type              | Activity |             |                |         |                  |             | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|-----------------------------|----------|-------------|----------------|---------|------------------|-------------|----------------------------|------------|-----------------|------------------|-------------------|
|                             | BHP      | Load Factor | Length (wkday) | hrs/day | Avg Daily Number | total hours | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Air Compressors             | 25       | 0.48        | 43             | 6       | 1.0              | 261         | 0.15                       | 0.44       | 0.79            | 0.05             | 0.05              |
| Crawler Tractors            | 185      | 0.43        | 43             | 2       | 1.0              | 87          | 0.20                       | 0.58       | 1.76            | 0.07             | 0.07              |
| Rubber Tired Loaders        | 78       | 0.36        | 43             | 2       | 1.0              | 87          | 0.11                       | 0.49       | 0.68            | 0.06             | 0.06              |
| Oher construction equipment | 310      | 0.42        | 43             | 4       | 1.0              | 174         | 0.35                       | 1.30       | 3.45            | 0.11             | 0.11              |
| Trenchers                   | 115      | 0.50        | 43             | 2       | 1.0              | 87          | 0.27                       | 1.03       | 1.66            | 0.14             | 0.14              |
| Cranes                      | 250      | 0.29        | 43             | 6       | 0.7              | 261         | 0.33                       | 0.96       | 3.09            | 0.11             | 0.11              |
| <b>Totals</b>               |          |             |                |         |                  |             | <b>1.3</b>                 | <b>4.4</b> | <b>10.6</b>     | <b>0.5</b>       | <b>0.5</b>        |

## Offsite Transmission Facilities

| Equipment Type         | Activity |             |                |         |                  |             | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|------------------------|----------|-------------|----------------|---------|------------------|-------------|----------------------------|------------|-----------------|------------------|-------------------|
|                        | BHP      | Load Factor | Length (wkday) | hrs/day | Avg Daily Number | total hours | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Generator Sets         | 30       | 0.74        | 22             | 8       | 1.0              | 174         | 0.56                       | 1.83       | 1.98            | 0.15             | 0.15              |
| Crawler Tractors       | 185      | 0.43        | 22             | 2       | 1.0              | 43          | 0.20                       | 0.58       | 1.76            | 0.07             | 0.07              |
| Rubber Tired Loaders   | 78       | 0.36        | 22             | 4       | 1.0              | 87          | 0.22                       | 0.98       | 1.35            | 0.11             | 0.11              |
| Rubber Tired Forklifts | 99       | 0.40        | 22             | 2       | 1.0              | 43          | 0.14                       | 0.68       | 0.89            | 0.08             | 0.08              |
| Trenchers              | 115      | 0.50        | 22             | 2       | 1.0              | 43          | 0.27                       | 1.03       | 1.66            | 0.14             | 0.14              |
| <b>Totals</b>          |          |             |                |         |                  |             | <b>1.4</b>                 | <b>5.1</b> | <b>7.6</b>      | <b>0.5</b>       | <b>0.5</b>        |

## Paving

| Equipment Type | Activity |             |                |         |                  |             | Criteria Emissions (lbs/d) |            |                 |                  |                   |
|----------------|----------|-------------|----------------|---------|------------------|-------------|----------------------------|------------|-----------------|------------------|-------------------|
|                | BHP      | Load Factor | Length (wkday) | hrs/day | Avg Daily Number | total hours | ROG                        | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Pavers         | 173      | 0.42        | 11             | 6       | 0.5              | 65          | 0.36                       | 1.65       | 2.78            | 0.15             | 0.15              |
| Rollers        | 83       | 0.38        | 11             | 6       | 0.5              | 65          | 0.19                       | 0.81       | 1.19            | 0.10             | 0.10              |
| <b>Totals</b>  |          |             |                |         |                  |             | <b>0.5</b>                 | <b>2.5</b> | <b>4.0</b>      | <b>0.3</b>       | <b>0.3</b>        |

## Mitigated Off Road Equipment Emissions

### Grading/Roads/Earthwork

| Equipment Type       | Activity |             |                |                 |          |                  |             | Mitigated Emissions (lbs/d) |             |                 |                  |                   |
|----------------------|----------|-------------|----------------|-----------------|----------|------------------|-------------|-----------------------------|-------------|-----------------|------------------|-------------------|
|                      | BHP      | Load Factor | Length (wkday) | Length (months) | hrs/ day | Avg Daily Number | total hours | ROG                         | CO          | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Crawler Tractors     | 185      | 0.43        | 22             | 1.0             | 8        | 1.0              | 174         | 0.20                        | 2.30        | 4.76            | 0.10             | 0.10              |
| Generator Sets       | 30       | 0.74        | 22             | 1.0             | 8        | 0.8              | 174         | 0.45                        | 1.47        | 1.58            | 0.12             | 0.12              |
| Scrapers             | 365      | 0.48        | 22             | 1.0             | 8        | 1.0              | 174         | 0.40                        | 6.20        | 9.44            | 0.21             | 0.21              |
| Rubber Tired Loaders | 78       | 0.36        | 22             | 1.0             | 8        | 2.0              | 174         | 0.20                        | 3.94        | 4.17            | 0.25             | 0.25              |
| Graders              | 185      | 0.41        | 22             | 1.0             | 8        | 1.0              | 174         | 0.15                        | 1.84        | 3.83            | 0.07             | 0.07              |
| Rollers              | 83       | 0.38        | 22             | 1.0             | 4        | 1.5              | 87          | 0.09                        | 1.62        | 1.83            | 0.11             | 0.11              |
| Pavers               | 173      | 0.42        | 22             | 1.0             | 4        | 2.0              | 87          | 0.29                        | 4.39        | 5.01            | 0.30             | 0.30              |
| <b>Totals</b>        |          |             |                |                 |          |                  |             | <b>0.7</b>                  | <b>11.8</b> | <b>14.8</b>     | <b>0.7</b>       | <b>0.7</b>        |

### Solar Panel Construction

| Equipment Type              | Activity |             |                |                 |          |                  |             | Mitigated Emissions (lbs/d) |            |                 |                  |                   |
|-----------------------------|----------|-------------|----------------|-----------------|----------|------------------|-------------|-----------------------------|------------|-----------------|------------------|-------------------|
|                             | BHP      | Load Factor | Length (wkday) | Length (months) | hrs/ day | Avg Daily Number | total hours | ROG                         | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Generator Sets              | 30       | 0.74        | 115            | 5.2             | 8        | 1.0              | 921         | 0.56                        | 1.83       | 1.98            | 0.15             | 0.15              |
| Air Compressors             | 25       | 0.48        | 115            | 5.2             | 8        | 1.0              | 921         | 0.20                        | 0.59       | 1.06            | 0.06             | 0.06              |
| Crawler Tractors            | 185      | 0.43        | 115            | 5.2             | 4        | 1.0              | 461         | 0.10                        | 1.15       | 2.38            | 0.05             | 0.05              |
| Rubber Tired Loaders        | 78       | 0.36        | 115            | 5.2             | 4        | 1.0              | 461         | 0.05                        | 0.98       | 1.04            | 0.06             | 0.06              |
| Rough Terrain Forklifts     | 99       | 0.40        | 115            | 5.2             | 5        | 1.5              | 576         | 0.12                        | 2.56       | 2.58            | 0.15             | 0.15              |
| Trenchers                   | 115      | 0.50        | 115            | 5.2             | 4        | 1.5              | 461         | 0.24                        | 3.09       | 3.37            | 0.30             | 0.30              |
| Oher construction equipment | 310      | 0.42        | 115            | 5.2             | 4        | 1.0              | 461         | 0.08                        | 1.30       | 2.28            | 0.04             | 0.04              |
| <b>Totals</b>               |          |             |                |                 |          |                  |             | <b>0.6</b>                  | <b>9.1</b> | <b>11.6</b>     | <b>0.6</b>       | <b>0.6</b>        |

## Substation and O&M Building Construction

| Equipment Type              | Activity |             |                |                 |          |                  |             | Mitigated Emissions (lbs/d) |            |                 |                  |                   |
|-----------------------------|----------|-------------|----------------|-----------------|----------|------------------|-------------|-----------------------------|------------|-----------------|------------------|-------------------|
|                             | BHP      | Load Factor | Length (wkday) | Length (months) | hrs/ day | Avg Daily Number | total hours | ROG                         | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Air Compressors             | 25       | 0.48        | 43             | 2.0             | 6        | 1.0              | 261         | 0.15                        | 0.44       | 0.79            | 0.05             | 0.05              |
| Crawler Tractors            | 185      | 0.43        | 43             | 2.0             | 2        | 1.0              | 87          | 0.05                        | 0.58       | 1.19            | 0.03             | 0.03              |
| Rubber Tired Loaders        | 78       | 0.36        | 43             | 2.0             | 2        | 1.0              | 87          | 0.03                        | 0.49       | 0.52            | 0.03             | 0.03              |
| Oher construction equipment | 310      | 0.42        | 43             | 2.0             | 4        | 1.0              | 174         | 0.08                        | 1.30       | 2.28            | 0.04             | 0.04              |
| Trenchers                   | 115      | 0.50        | 43             | 2.0             | 2        | 1.0              | 87          | 0.08                        | 1.03       | 1.12            | 0.10             | 0.10              |
| Cranes                      | 250      | 0.29        | 43             | 2.0             | 6        | 0.7              | 261         | 0.08                        | 0.96       | 2.09            | 0.04             | 0.04              |
| <b>Totals</b>               |          |             |                |                 |          |                  |             | <b>0.3</b>                  | <b>4.4</b> | <b>7.2</b>      | <b>0.2</b>       | <b>0.2</b>        |

## Offsite Transmission Facilities

| Equipment Type          | Activity |             |                |                 |          |                  |             | Mitigated Emissions (lbs/d) |            |                 |                  |                   |
|-------------------------|----------|-------------|----------------|-----------------|----------|------------------|-------------|-----------------------------|------------|-----------------|------------------|-------------------|
|                         | BHP      | Load Factor | Length (wkday) | Length (months) | hrs/ day | Avg Daily Number | total hours | ROG                         | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Generator Sets          | 30       | 0.74        | 22             | 1.0             | 8        | 1.0              | 174         | 0.56                        | 1.83       | 1.98            | 0.15             | 0.15              |
| Crawler Tractors        | 185      | 0.43        | 22             | 1.0             | 2        | 1.0              | 43          | 0.05                        | 0.58       | 1.19            | 0.03             | 0.03              |
| Rubber Tired Loaders    | 78       | 0.36        | 22             | 1.0             | 4        | 1.0              | 87          | 0.05                        | 0.98       | 1.04            | 0.06             | 0.06              |
| Rough Terrain Forklifts | 99       | 0.40        | 22             | 1.0             | 2        | 1.0              | 43          | 0.03                        | 0.68       | 0.69            | 0.04             | 0.04              |
| Trenchers               | 115      | 0.50        | 22             | 1.0             | 2        | 1.0              | 43          | 0.08                        | 1.03       | 1.12            | 0.10             | 0.10              |
| <b>Totals</b>           |          |             |                |                 |          |                  |             | <b>0.8</b>                  | <b>5.1</b> | <b>6.0</b>      | <b>0.4</b>       | <b>0.4</b>        |

## Paving

| Equipment Type | Activity |             |                |                 |          |                  |             | Mitigated Emissions (lbs/d) |            |                 |                  |                   |
|----------------|----------|-------------|----------------|-----------------|----------|------------------|-------------|-----------------------------|------------|-----------------|------------------|-------------------|
|                | BHP      | Load Factor | Length (wkday) | Length (months) | hrs/ day | Avg Daily Number | total hours | ROG                         | CO         | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Pavers         | 173      | 0.42        | 11             | 0.5             | 6        | 0.5              | 65          | 0.11                        | 1.65       | 1.88            | 0.11             | 0.11              |
| Rollers        | 83       | 0.38        | 11             | 0.5             | 6        | 0.5              | 65          | 0.04                        | 0.81       | 0.92            | 0.05             | 0.05              |
| <b>Totals</b>  |          |             |                |                 |          |                  |             | <b>0.2</b>                  | <b>2.5</b> | <b>2.8</b>      | <b>0.2</b>       | <b>0.2</b>        |

## Entrained Road Dust

Entrained road dust emissions are generated by vehicles traveling on both paved and unpaved roads. These equations are based on the paved and unpaved roads emission factors found in AP-42. Defaults are from URBEMIS.

### Emission Factors - Paved Roads

$$EF_{PM_{10}} = k \times (sL \div 2) \times 0.65 \times (W \div 3) \times 1.5 = 0.000057 \text{ lbs } PM_{10}/VMT$$

| Constant | Description  | Value |
|----------|--|-------|
| $k =$    | <i>particle size multiplier for particle size range and units of interest</i>  | 0.016 |
| $sL =$   | <i>road surface silt loading in <math>g/m^2</math> (allowable range is 0.02 to 400 <math>g/m^2</math>)</i>   | 0.1   |
| $W =$    | <i>average weight of the vehicles traveling the road in megagrams (mean average fleet vehicle weight ranging from 1.8 - 39 megagrams or 2.0 - 42 tons)</i> | 2.2   |

### Emission Factors - Unpaved Roads

$$EF_{PM_{10}} = (k \times (s \div 12) \times 1.0 \times (S \div 30) \times 0.5) \div (M \div 0.5) \times 0.2 = 0.086 \text{ lbs } PM_{10}/VMT$$

| Constant | Description   | Value |
|----------|---|-------|
| $k =$    | <i>the fraction of particles less than or equal to the particle size cutoff of 10 microns</i> | 1.8   |
| $s =$    | <i>surface material silt content (%) (allowable range [1.8 - 25.2 %])</i>                     | 4.3%  |
| $S =$    | <i>the average vehicle speed (mph) (allowable range [10 - 43 mph])</i>                        | 40    |
| $M =$    | <i>surface moisture content (%) (allowable range 0.03 - 13 %)</i>                             | 0.5%  |



**Entrained Road Dust Emissions**

| Phase/Category                                 |              | VMT/d        |              | Paved Roads (lbs/d) |                   | Unpaved Roads (lbs/d) |                   | Total Roads (lbs/d) |                   | Mitigated (lbs/d) |                   |
|--|--------------|--------------|--------------|---------------------|-------------------|-----------------------|-------------------|---------------------|-------------------|-------------------|-------------------|
|  |              | (paved)      | (unpaved)    | PM <sub>10</sub>    | PM <sub>2.5</sub> | PM <sub>10</sub>      | PM <sub>2.5</sub> | PM <sub>10</sub>    | PM <sub>2.5</sub> | PM <sub>10</sub>  | PM <sub>2.5</sub> |
| Grading/Roads/<br>Earthwork                    | Employee     | 1,134        | 1,134        | 0.065               | 0.007             | 97.563                | 10.535            | 97.628              | 10.542            | 41.980            | 4.533             |
|  | Vendor       | 68           | 15           | 0.004               | 0.000             | 1.279                 | 0.138             | 1.283               | 0.139             | 0.552             | 0.060             |
|  | <b>TOTAL</b> | <b>1,202</b> | <b>1,149</b> | <b>0.07</b>         | <b>0.01</b>       | <b>98.84</b>          | <b>10.67</b>      | <b>98.91</b>        | <b>10.68</b>      | <b>42.53</b>      | <b>4.59</b>       |
| Solar Panel<br>Construction                    | Employee     | 2,059        | 2,059        | 0.1178              | 0.0127            | 177.082               | 19.1207           | 177.1996            | 19.1334           | 76.196            | 8.227             |
|  | Vendor       | 298          | 16           | 0.0171              | 0.0018            | 1.415                 | 0.1528            | 1.4319              | 0.1546            | 0.616             | 0.066             |
|  | <b>TOTAL</b> | <b>2,357</b> | <b>2,076</b> | <b>0.13</b>         | <b>0.01</b>       | <b>178.50</b>         | <b>19.27</b>      | <b>178.63</b>       | <b>19.29</b>      | <b>76.81</b>      | <b>8.29</b>       |
| Substation and<br>O&M Building<br>Construction | Employee     | 241          | 241          | 0.0138              | 0.0015            | 20.695                | 2.2346            | 20.7090             | 2.2361            | 8.905             | 0.962             |
|  | Vendor       | 32           | 8            | 0.0019              | 0.0002            | 0.661                 | 0.0714            | 0.6629              | 0.0716            | 0.285             | 0.031             |
|  | <b>TOTAL</b> | <b>273</b>   | <b>248</b>   | <b>0.02</b>         | <b>0.00</b>       | <b>21.36</b>          | <b>2.31</b>       | <b>21.37</b>        | <b>2.31</b>       | <b>9.19</b>       | <b>0.99</b>       |
| Offsite<br>Transmission<br>Facilities          | Employee     | 206          | 206          | 0.0118              | 0.0013            | 17.739                | 1.9154            | 17.7505             | 1.9166            | 7.633             | 0.824             |
|  | Vendor       | 55           | 0            | 0.0031              | 0.0003            | 0.000                 | 0.0000            | 0.0031              | 0.0003            | 0.001             | 0.000             |
|  | <b>TOTAL</b> | <b>261</b>   | <b>206</b>   | <b>0.01</b>         | <b>0.00</b>       | <b>17.74</b>          | <b>1.92</b>       | <b>17.75</b>        | <b>1.92</b>       | <b>7.63</b>       | <b>0.82</b>       |
| Paving   | Employee     | 103          | 103          | 0.0059              | 0.0006            | 8.869                 | 0.9577            | 8.8753              | 0.9583            | 3.816             | 0.412             |
|  | Vendor       | 30           | 1            | 0.0017              | 0.0002            | 0.128                 | 0.0138            | 0.1296              | 0.0140            | 0.056             | 0.006             |
|  | <b>TOTAL</b> | <b>133</b>   | <b>105</b>   | <b>0.01</b>         | <b>0.00</b>       | <b>9.00</b>           | <b>0.97</b>       | <b>9.00</b>         | <b>0.97</b>       | <b>3.87</b>       | <b>0.42</b>       |
| <b>GRAND TOTAL</b>                             |              | <b>4,227</b> | <b>3,784</b> | <b>0.2</b>          | <b>0.0</b>        | <b>325.4</b>          | <b>35.1</b>       | <b>325.7</b>        | <b>35.2</b>       | <b>140.0</b>      | <b>15.1</b>       |

Notes: Mitigation of 57% for traffic speed restriction

Per ICAPCD, vehicular in Imperial County is 50% on unpaved roads.

## Grading Fugitive Dust

Fugitive dust emissions from grading equipment passes are estimated using the methodology described in Section 11.9, Western Surface Coal Mining, of the EPA AP-42.

AP-42 estimates the emission factor of PM<sub>10</sub> applying a scaling factor to that of PM<sub>15</sub>. Similarly, the emission factor of PM<sub>2.5</sub> is scaled from that of total suspended particulates (TSP). The equations used to calculate the emission factors for PM<sub>15</sub> and TSP and the scaling factor for those of PM<sub>10</sub> and PM<sub>2.5</sub> are presented below:

### Emission Factors (lbs/day)

|                              |                          |       |
|------------------------------|--------------------------|-------|
| <b>EF PM<sub>15</sub></b> =  | $0.051 \times S^{2.0} =$ | 2.571 |
| <b>EF PM<sub>TSP</sub></b> = | $0.04 \times S^{2.5} =$  | 5.373 |

$S =$  mean vehicle speed (mph). The AP-42 default value is 7.1

|                              |                                 |       |
|------------------------------|---------------------------------|-------|
| <b>EF PM<sub>10</sub></b> =  | $EF_{PM15} \times F_{PM10} =$   | 1.5   |
| <b>EF PM<sub>2.5</sub></b> = | $EF_{PMTSP} \times F_{PM2.5} =$ | 0.167 |

$F_{PM10} =$  PM<sub>10</sub> scaling factor. The AP-42 default value is 0.6

$F_{PM2.5} =$  PM<sub>2.5</sub> scaling factor. The AP-42 default value is 0.031

### Emissions

The grading dust emissions are calculated by multiplying the emission factors with the total vehicle miles traveled (VMT) for the grading equipment (i.e., grader). The VMT for grader (VMT<sub>G</sub>) are estimated based on the dimensions of the grading area and the blade width of the grading equipment.

**Emissions (lb) =**      **EF × VMT<sub>G</sub>**      # of Days = 115

| Pollutant         | Emissions |       |
|-------------------|-----------|-------|
|                   | total lbs | lbs/d |
| PM <sub>10</sub>  | 138.08    | 1.199 |
| PM <sub>2.5</sub> | 14.91     | 0.129 |

where VMT =  $A_s \div W_b \times ft^2$  per acre ÷ ft per mile = 89.5

$A_s =$  conservative acreage of disturbance is approximately 25% of gross acreage 130.2

$W_b =$  Blade width of the grading equipment. (default based on Caterpillar’s 140 Motor Grader. 12

**EMFAC 2011**

**2014 Estimated Annual Emission Rates**

*EMFAC2011 Vehicle Categories*

*Imperial COUNTY*

| Vehicle Info                          |      |           | Emission Factor (grams/mile) |               |                 |                  |               |               |                   |               |               |                 |                 |                  |
|---------------------------------------|------|-----------|------------------------------|---------------|-----------------|------------------|---------------|---------------|-------------------|---------------|---------------|-----------------|-----------------|------------------|
| Type                                  | Fuel | VMT       | ROG                          | CO            | NO <sub>x</sub> | PM <sub>10</sub> |               |               | PM <sub>2.5</sub> |               |               | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O |
|                                       |      |           |                              |               |                 | Exhaust          | TW+BW         | Total         | Exhaust           | TW+BW         | Total         |                 |                 |                  |
| LDA                                   | GAS  | 3,810,354 | 0.1431                       | 3.1103        | 0.4072          | 0.0018           | 0.0447        | 0.0466        | 0.0017            | 0.0177        | 0.0194        | 285.7           | 0.0278          | 0.0294           |
| LDA                                   | DSL  | 11,288    | 0.0376                       | 0.1941        | 0.5580          | 0.0275           | 0.0447        | 0.0723        | 0.0253            | 0.0177        | 0.0431        | 308.5           |                 |                  |
| LDT1                                  | GAS  | 590,382   | 0.1877                       | 5.1765        | 0.5521          | 0.0042           | 0.0447        | 0.0489        | 0.0038            | 0.0177        | 0.0215        | 334.2           | 0.0315          | 0.0433           |
| LDT1                                  | DSL  | 665       | 0.0584                       | 0.2682        | 0.7043          | 0.0477           | 0.0447        | 0.0925        | 0.0439            | 0.0177        | 0.0617        | 314.9           |                 |                  |
| LDT2                                  | GAS  | 1,391,517 | 0.0872                       | 2.8720        | 0.3791          | 0.0020           | 0.0447        | 0.0467        | 0.0018            | 0.0177        | 0.0195        | 408.7           | 0.0315          | 0.0433           |
| LDT2                                  | DSL  | 806       | 0.0417                       | 0.2235        | 0.6565          | 0.0317           | 0.0447        | 0.0765        | 0.0292            | 0.0177        | 0.0469        | 320.0           |                 |                  |
| <b>Weighted Average for Employees</b> |      |           | <b>0.1340</b>                | <b>3.2569</b> | <b>0.4156</b>   | <b>0.0022</b>    | <b>0.0447</b> | <b>0.0469</b> | <b>0.0020</b>     | <b>0.0177</b> | <b>0.0197</b> | <b>320.2</b>    | <b>0.0291</b>   | <b>0.0342</b>    |
| LHD1                                  | GAS  | 219,732   | 0.1010                       | 2.2642        | 0.8235          | 0.0009           | 0.0447        | 0.0456        | 0.0008            | 0.0177        | 0.0186        | 562.1           | 0.0315          | 0.0433           |
| MDV                                   | GAS  | 1,385,611 | 0.0964                       | 3.1290        | 0.5245          | 0.0018           | 0.0447        | 0.0465        | 0.0016            | 0.0177        | 0.0194        | 531.4           | 0.0315          | 0.0433           |
| T6 instate construction small         | DSL  | 16,565    | 0.2062                       | 0.8836        | 5.2659          | 0.2342           | 0.1423        | 0.3765        | 0.2154            | 0.0589        | 0.2743        | 1,031.2         | 0.6037          | 0.5554           |
| T7 tractor construction               | DSL  | 12,313    | 0.2371                       | 1.0418        | 11.6587         | 0.1899           | 0.0977        | 0.2877        | 0.1747            | 0.0355        | 0.2102        | 1,597.1         | 0.6037          | 0.5554           |

Notes: - Criteria and CO<sub>2</sub> factors come from 2014 EMFAC2011 and represent Estimated Annual Emission Rates for Imperial County in the Salton Sea Air Basin

- CH<sub>4</sub> and N<sub>2</sub>O factors come from Local Government Operations Protocol: For the quantification and reporting of greenhouse gas emissions inventories. Version 1.1. California Air Resources Board, California Climate Action Registry, ICLEI - Local Governments for Sustainability, and The Climate Registry. May 2010

## 2014 Offroad Emission Factors (g/hp/hr)

| Veh Type                     | BHP | Load Factor | Emission Factor (g/bhp-hr) |       |                 |                  |                   |                 |                 |
|------------------------------|-----|-------------|----------------------------|-------|-----------------|------------------|-------------------|-----------------|-----------------|
|                              |     |             | ROG                        | CO    | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> | CO <sub>2</sub> | CH <sub>4</sub> |
| Air Compressors              | 25  | 0.48        | 0.960                      | 2.780 | 5.000           | 0.291            | 0.291             | 568.3           | 0.086           |
| Cranes                       | 250 | 0.29        | 0.496                      | 1.427 | 4.605           | 0.160            | 0.160             | 568.3           | 0.044           |
| Crawler Tractors             | 185 | 0.43        | 0.571                      | 1.640 | 5.029           | 0.192            | 0.192             | 568.3           | 0.051           |
| Generator Sets               | 30  | 0.74        | 1.427                      | 4.683 | 5.048           | 0.389            | 0.389             | 568.3           | 0.128           |
| Graders                      | 185 | 0.41        | 0.464                      | 1.379 | 4.241           | 0.146            | 0.146             | 568.3           | 0.041           |
| Other Construction Equipment | 310 | 0.42        | 0.308                      | 1.135 | 3.008           | 0.098            | 0.098             | 568.3           | 0.027           |
| Pavers                       | 173 | 0.42        | 0.750                      | 3.429 | 5.794           | 0.319            | 0.319             | 568.3           | 0.067           |
| Rollers                      | 83  | 0.38        | 0.887                      | 3.882 | 5.690           | 0.475            | 0.475             | 568.3           | 0.080           |
| Rough Terrain Forklifts      | 99  | 0.40        | 0.798                      | 3.905 | 5.107           | 0.431            | 0.431             | 568.3           | 0.072           |
| Rubber Tired Loaders         | 78  | 0.36        | 0.869                      | 3.973 | 5.454           | 0.459            | 0.459             | 568.3           | 0.078           |
| Scrapers                     | 365 | 0.48        | 0.536                      | 2.007 | 4.621           | 0.178            | 0.178             | 568.3           | 0.048           |
| Trenchers                    | 115 | 0.50        | 1.061                      | 4.063 | 6.558           | 0.550            | 0.550             | 568.3           | 0.095           |

*From: CalEEMod Users Guide - Appendix D, CalEEMod User's Tips (June 2011), and 2011 Carl Moyer Program Guidelines*

## Mitigated Off-Road Emission Factors

### Percentage Reduction from Tier 1 to Tier 2

| Engine Size<br>(hp) | Tier 1 to Tier 2 |                 |       |
|---------------------|------------------|-----------------|-------|
|                     | ROG              | NO <sub>x</sub> | PM    |
| 75 - 99             | 76.5%            | 22.9%           | 45.7% |
| 100 - 174           | 70.1%            | 32.5%           | 27.6% |
| 175 - 299           | 75.5%            | 32.5%           | 62.5% |
| 300 - 600           | 76.0%            | 33.9%           | 62.5% |

Mitigation Measures and Control Efficiencies page at SCAQMD  
([http://www.aqmd.gov/ceqa/handbook/mitigation/MM\\_intro.html](http://www.aqmd.gov/ceqa/handbook/mitigation/MM_intro.html))

### Adjusted Offroad Emission Factors (g/hp/hr)

| Veh Type                     | BHP | Emission Factor (g/bhp-hr) |                 |                  |                   |
|------------------------------|-----|----------------------------|-----------------|------------------|-------------------|
|                              |     | ROG                        | NO <sub>x</sub> | PM <sub>10</sub> | PM <sub>2.5</sub> |
| Cranes                       | 250 | 0.122                      | 3.107           | 0.060            | 0.060             |
| Crawler Tractors             | 185 | 0.140                      | 3.393           | 0.072            | 0.072             |
| Graders                      | 185 | 0.114                      | 2.861           | 0.055            | 0.055             |
| Other Construction Equipment | 310 | 0.074                      | 1.988           | 0.037            | 0.037             |
| Pavers                       | 173 | 0.224                      | 3.909           | 0.231            | 0.231             |
| Rollers                      | 83  | 0.209                      | 4.387           | 0.258            | 0.258             |
| Rough Terrain Forklifts      | 99  | 0.188                      | 3.938           | 0.234            | 0.234             |
| Rubber Tired Loaders         | 78  | 0.204                      | 4.205           | 0.249            | 0.249             |
| Scrapers                     | 365 | 0.129                      | 3.054           | 0.067            | 0.067             |
| Trenchers                    | 115 | 0.317                      | 4.424           | 0.398            | 0.398             |

# Activity Data

**Iris Solar Farm**

MW = 130

| Activity Phase                                   | Schedule |       | Trips |          |         |     |
|--|----------|-------|-------|----------|---------|-----|
|  | Mo       | WD    | Emp   | Emp w/rs | Vendors |     |
|  |          |       |       |          | T6      | T7  |
| Grading/Roads/Earthwork                          | 1.0      | 21.7  | 83    | 76       | 0.2     | 1.1 |
| Solar Panel Construction                         | 5.3      | 115.1 | 151   | 137      | 0.2     | 3.0 |
| Substation, Building and Water Tank Construction | 2.0      | 43.5  | 18    | 16       | 12.8    | 0.4 |
| Offsite Transmission Facilities                  | 1.0      | 21.7  | 15    | 14       | 0.6     | 1.1 |
| Paving   | 0.5      | 10.9  | 8     | 7        | 0.2     | 0.4 |

| From TIA |           |
|----------|-----------|
| 300      | employees |
| 20       | trucks    |