

Rancho Estates Mobile Home Park
Fire Improvements Project

APPENDIX

G

AIR QUALITY AND GHG
CALCULATIONS

Rancho Goleta Mobile Home Park Fire Improvements Santa Barbara-South of Santa Ynez Range County, Annual

1.0 Project Characteristics

1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|----------------------------|------|--------|-------------|--------------------|------------|
| Other Non-Asphalt Surfaces | 0.00 | | 0.75 | | 0 |

1.2 Other Project Characteristics

| | | | | | |
|---------------------------------|----------------------------|---------------------------------|-------|----------------------------------|-------|
| Urbanization | Urban | Wind Speed (m/s) | 2.7 | Precipitation Freq (Days) | 37 |
| Climate Zone | 8 | | | Operational Year | 2018 |
| Utility Company | Southern California Edison | | | | |
| CO2 Intensity (lb/MW hr) | 630.89 | CH4 Intensity (lb/MW hr) | 0.029 | N2O Intensity (lb/MW hr) | 0.006 |

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot acreage based on total disturbed area

Construction Phase - Based on applicants construction schedule. There will be no architectural coating.

Grading - Based on applicant estimated total disturbed area.

Mobile Land Use Mitigation -

Area Mitigation - No architectural coatings

| Table Name | Column Name | Default Value | New Value |
|---------------------------|------------------|---------------|-----------|
| tblConstructionPhase | NumDays | 5.00 | 1.00 |
| tblConstructionPhase | NumDays | 100.00 | 7.00 |
| tblConstructionPhase | NumDays | 10.00 | 2.00 |
| tblConstructionPhase | NumDays | 2.00 | 7.00 |
| tblConstructionPhase | NumDays | 5.00 | 2.00 |
| tblConstructionPhase | NumDays | 1.00 | 3.00 |
| tblConstructionPhase | PhaseEndDate | 1/31/2017 | 1/30/2017 |
| tblConstructionPhase | PhaseStartDate | 1/31/2017 | 1/30/2017 |
| tblGrading | AcresOfGrading | 0.00 | 0.75 |
| tblGrading | AcresOfGrading | 1.50 | 0.75 |
| tblGrading | MaterialExported | 0.00 | 75.00 |
| tblGrading | MaterialExported | 0.00 | 80.00 |
| tblProjectCharacteristics | OperationalYear | 2014 | 2018 |

2.0 Emissions Summary

3.0 Construction Detail

Construction Phase

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|--------------|-----------------------|-----------------------|------------|-----------|---------------|----------|-------------------|
| 1 | Demolition | Demolition | 1/1/2017 | 1/3/2017 | 5 | 2 | |
| 2 | Site Preparation | Site Preparation | 1/4/2017 | 1/6/2017 | 5 | 3 | |
| 3 | Grading | Grading | 1/7/2017 | 1/17/2017 | 5 | 7 | |
| 4 | Building Construction | Building Construction | 1/18/2017 | 1/26/2017 | 5 | 7 | |
| 5 | Paving | Paving | 1/27/2017 | 1/30/2017 | 5 | 2 | |
| 6 | Architectural Coating | Architectural Coating | 1/30/2017 | 1/30/2017 | 5 | 1 | |

Acres of Grading (Site Preparation Phase): 0.75

Acres of Grading (Grading Phase): 0.75

Acres of Paving: 0

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

OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|-----------------------|---------------------------|--------|-------------|-------------|-------------|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Paving | Cement and Mortar Mixers | 4 | 6.00 | 9 | 0.56 |
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Grading | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Building Construction | Cranes | 1 | 4.00 | 226 | 0.29 |
| Building Construction | Forklifts | 2 | 6.00 | 89 | 0.20 |
| Site Preparation | Graders | 1 | 8.00 | 174 | 0.41 |
| Paving | Pavers | 1 | 7.00 | 125 | 0.42 |
| Paving | Rollers | 1 | 7.00 | 80 | 0.38 |
| Demolition | Rubber Tired Dozers | 1 | 1.00 | 255 | 0.40 |
| Grading | Rubber Tired Dozers | 1 | 1.00 | 255 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 2 | 8.00 | 97 | 0.37 |
| Demolition | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| Grading | Tractors/Loaders/Backhoes | 2 | 6.00 | 97 | 0.37 |
| Paving | Tractors/Loaders/Backhoes | 1 | 7.00 | 97 | 0.37 |
| Site Preparation | Tractors/Loaders/Backhoes | 1 | 8.00 | 97 | 0.37 |

Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|-----------------------|-------------------------|--------------------|--------------------|---------------------|--------------------|--------------------|---------------------|----------------------|----------------------|-----------------------|
| Demolition | 4 | 10.00 | 0.00 | 0.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 2 | 5.00 | 0.00 | 10.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Grading | 4 | 10.00 | 0.00 | 9.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 5 | 0.00 | 0.00 | 0.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Paving | 7 | 18.00 | 0.00 | 0.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 0.00 | 0.00 | 0.00 | 12.30 | 4.60 | 20.00 | LD_Mix | HDT_Mix | HHDT |

3.1 Mitigation Measures Construction

3.2 Demolition - 2017

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.2000e-003 | 0.0105 | 8.5800e-003 | 1.0000e-005 | | 7.3000e-004 | 7.3000e-004 | | 6.9000e-004 | 6.9000e-004 | 0.0000 | 1.0739 | 1.0739 | 2.1000e-004 | 0.0000 | 1.0784 |
| Total | 1.2000e-003 | 0.0105 | 8.5800e-003 | 1.0000e-005 | | 7.3000e-004 | 7.3000e-004 | | 6.9000e-004 | 6.9000e-004 | 0.0000 | 1.0739 | 1.0739 | 2.1000e-004 | 0.0000 | 1.0784 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 6.0000e-005 | 5.4000e-004 | 0.0000 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0722 | 0.0722 | 0.0000 | 0.0000 | 0.0723 |
| Total | 4.0000e-005 | 6.0000e-005 | 5.4000e-004 | 0.0000 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0722 | 0.0722 | 0.0000 | 0.0000 | 0.0723 |

3.2 Demolition - 2017**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.2000e-003 | 0.0105 | 8.5800e-003 | 1.0000e-005 | | 7.3000e-004 | 7.3000e-004 | | 6.9000e-004 | 6.9000e-004 | 0.0000 | 1.0739 | 1.0739 | 2.1000e-004 | 0.0000 | 1.0784 |
| Total | 1.2000e-003 | 0.0105 | 8.5800e-003 | 1.0000e-005 | | 7.3000e-004 | 7.3000e-004 | | 6.9000e-004 | 6.9000e-004 | 0.0000 | 1.0739 | 1.0739 | 2.1000e-004 | 0.0000 | 1.0784 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.0000e-005 | 6.0000e-005 | 5.4000e-004 | 0.0000 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0722 | 0.0722 | 0.0000 | 0.0000 | 0.0723 |
| Total | 4.0000e-005 | 6.0000e-005 | 5.4000e-004 | 0.0000 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0722 | 0.0722 | 0.0000 | 0.0000 | 0.0723 |

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.0000e-004 | 0.0000 | 4.0000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9000e-003 | 0.0190 | 0.0109 | 1.0000e-005 | | 1.1600e-003 | 1.1600e-003 | | 1.0600e-003 | 1.0600e-003 | 0.0000 | 1.3007 | 1.3007 | 4.0000e-004 | 0.0000 | 1.3091 |
| Total | 1.9000e-003 | 0.0190 | 0.0109 | 1.0000e-005 | 4.0000e-004 | 1.1600e-003 | 1.5600e-003 | 4.0000e-005 | 1.0600e-003 | 1.1000e-003 | 0.0000 | 1.3007 | 1.3007 | 4.0000e-004 | 0.0000 | 1.3091 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.1000e-004 | 1.4400e-003 | 1.5400e-003 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 1.0000e-004 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | 0.0000 | 0.3304 | 0.3304 | 0.0000 | 0.0000 | 0.3304 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-005 | 5.0000e-005 | 4.0000e-004 | 0.0000 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0542 | 0.0542 | 0.0000 | 0.0000 | 0.0542 |
| Total | 1.4000e-004 | 1.4900e-003 | 1.9400e-003 | 0.0000 | 1.5000e-004 | 2.0000e-005 | 1.7000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | 0.0000 | 0.3845 | 0.3845 | 0.0000 | 0.0000 | 0.3846 |

3.3 Site Preparation - 2017**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 4.0000e-004 | 0.0000 | 4.0000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.9000e-003 | 0.0190 | 0.0109 | 1.0000e-005 | | 1.1600e-003 | 1.1600e-003 | | 1.0600e-003 | 1.0600e-003 | 0.0000 | 1.3007 | 1.3007 | 4.0000e-004 | 0.0000 | 1.3091 |
| Total | 1.9000e-003 | 0.0190 | 0.0109 | 1.0000e-005 | 4.0000e-004 | 1.1600e-003 | 1.5600e-003 | 4.0000e-005 | 1.0600e-003 | 1.1000e-003 | 0.0000 | 1.3007 | 1.3007 | 4.0000e-004 | 0.0000 | 1.3091 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.1000e-004 | 1.4400e-003 | 1.5400e-003 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 1.0000e-004 | 2.0000e-005 | 2.0000e-005 | 4.0000e-005 | 0.0000 | 0.3304 | 0.3304 | 0.0000 | 0.0000 | 0.3304 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.0000e-005 | 5.0000e-005 | 4.0000e-004 | 0.0000 | 7.0000e-005 | 0.0000 | 7.0000e-005 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0542 | 0.0542 | 0.0000 | 0.0000 | 0.0542 |
| Total | 1.4000e-004 | 1.4900e-003 | 1.9400e-003 | 0.0000 | 1.5000e-004 | 2.0000e-005 | 1.7000e-004 | 4.0000e-005 | 2.0000e-005 | 6.0000e-005 | 0.0000 | 0.3845 | 0.3845 | 0.0000 | 0.0000 | 0.3846 |

3.4 Grading - 2017

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.0400e-003 | 0.0000 | 3.0400e-003 | 1.4900e-003 | 0.0000 | 1.4900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.2200e-003 | 0.0367 | 0.0300 | 4.0000e-005 | | 2.5400e-003 | 2.5400e-003 | | 2.4300e-003 | 2.4300e-003 | 0.0000 | 3.7588 | 3.7588 | 7.4000e-004 | 0.0000 | 3.7743 |
| Total | 4.2200e-003 | 0.0367 | 0.0300 | 4.0000e-005 | 3.0400e-003 | 2.5400e-003 | 5.5800e-003 | 1.4900e-003 | 2.4300e-003 | 3.9200e-003 | 0.0000 | 3.7588 | 3.7588 | 7.4000e-004 | 0.0000 | 3.7743 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.0000e-004 | 1.2900e-003 | 1.3900e-003 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 9.0000e-005 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 0.0000 | 0.2973 | 0.2973 | 0.0000 | 0.0000 | 0.2974 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3000e-004 | 2.2000e-004 | 1.8700e-003 | 0.0000 | 3.2000e-004 | 0.0000 | 3.2000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2527 | 0.2527 | 1.0000e-005 | 0.0000 | 0.2530 |
| Total | 2.3000e-004 | 1.5100e-003 | 3.2600e-003 | 0.0000 | 4.0000e-004 | 2.0000e-005 | 4.1000e-004 | 1.1000e-004 | 1.0000e-005 | 1.2000e-004 | 0.0000 | 0.5500 | 0.5500 | 1.0000e-005 | 0.0000 | 0.5504 |

3.4 Grading - 2017**Mitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---------------|--------------------|---------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 3.0400e-003 | 0.0000 | 3.0400e-003 | 1.4900e-003 | 0.0000 | 1.4900e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.2200e-003 | 0.0367 | 0.0300 | 4.0000e-005 | | 2.5400e-003 | 2.5400e-003 | | 2.4300e-003 | 2.4300e-003 | 0.0000 | 3.7588 | 3.7588 | 7.4000e-004 | 0.0000 | 3.7743 |
| Total | 4.2200e-003 | 0.0367 | 0.0300 | 4.0000e-005 | 3.0400e-003 | 2.5400e-003 | 5.5800e-003 | 1.4900e-003 | 2.4300e-003 | 3.9200e-003 | 0.0000 | 3.7588 | 3.7588 | 7.4000e-004 | 0.0000 | 3.7743 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 1.0000e-004 | 1.2900e-003 | 1.3900e-003 | 0.0000 | 8.0000e-005 | 2.0000e-005 | 9.0000e-005 | 2.0000e-005 | 1.0000e-005 | 3.0000e-005 | 0.0000 | 0.2973 | 0.2973 | 0.0000 | 0.0000 | 0.2974 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.3000e-004 | 2.2000e-004 | 1.8700e-003 | 0.0000 | 3.2000e-004 | 0.0000 | 3.2000e-004 | 9.0000e-005 | 0.0000 | 9.0000e-005 | 0.0000 | 0.2527 | 0.2527 | 1.0000e-005 | 0.0000 | 0.2530 |
| Total | 2.3000e-004 | 1.5100e-003 | 3.2600e-003 | 0.0000 | 4.0000e-004 | 2.0000e-005 | 4.1000e-004 | 1.1000e-004 | 1.0000e-005 | 1.2000e-004 | 0.0000 | 0.5500 | 0.5500 | 1.0000e-005 | 0.0000 | 0.5504 |

3.6 Paving - 2017

Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.0400e-003 | 9.8300e-003 | 7.2400e-003 | 1.0000e-005 | | 6.0000e-004 | 6.0000e-004 | | 5.6000e-004 | 5.6000e-004 | 0.0000 | 0.9697 | 0.9697 | 2.7000e-004 | 0.0000 | 0.9754 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 1.0400e-003 | 9.8300e-003 | 7.2400e-003 | 1.0000e-005 | | 6.0000e-004 | 6.0000e-004 | | 5.6000e-004 | 5.6000e-004 | 0.0000 | 0.9697 | 0.9697 | 2.7000e-004 | 0.0000 | 0.9754 |

Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 1.1000e-004 | 9.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1300 | 0.1300 | 1.0000e-005 | 0.0000 | 0.1301 |
| Total | 6.0000e-005 | 1.1000e-004 | 9.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1300 | 0.1300 | 1.0000e-005 | 0.0000 | 0.1301 |

3.6 Paving - 2017

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|--------------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 1.0400e-003 | 9.8300e-003 | 7.2400e-003 | 1.0000e-005 | | 6.0000e-004 | 6.0000e-004 | | 5.6000e-004 | 5.6000e-004 | 0.0000 | 0.9697 | 0.9697 | 2.7000e-004 | 0.0000 | 0.9754 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 1.0400e-003 | 9.8300e-003 | 7.2400e-003 | 1.0000e-005 | | 6.0000e-004 | 6.0000e-004 | | 5.6000e-004 | 5.6000e-004 | 0.0000 | 0.9697 | 0.9697 | 2.7000e-004 | 0.0000 | 0.9754 |

Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|--------------|--------------------|--------------------|--------------------|---------------|--------------------|---------------|--------------------|--------------------|---------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 6.0000e-005 | 1.1000e-004 | 9.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1300 | 0.1300 | 1.0000e-005 | 0.0000 | 0.1301 |
| Total | 6.0000e-005 | 1.1000e-004 | 9.6000e-004 | 0.0000 | 1.6000e-004 | 0.0000 | 1.7000e-004 | 4.0000e-005 | 0.0000 | 4.0000e-005 | 0.0000 | 0.1300 | 0.1300 | 1.0000e-005 | 0.0000 | 0.1301 |

3.7 Architectural Coating - 2017

Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------|--------------------|--------------------|--------------------|---------------|---------------|--------------------|--------------------|----------------|--------------------|--------------------|---------------|---------------|---------------|--------------------|---------------|---------------|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 1.7000e-004 | 1.0900e-003 | 9.3000e-004 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.1277 | 0.1277 | 1.0000e-005 | 0.0000 | 0.1280 |
| Total | 1.7000e-004 | 1.0900e-003 | 9.3000e-004 | 0.0000 | | 9.0000e-005 | 9.0000e-005 | | 9.0000e-005 | 9.0000e-005 | 0.0000 | 0.1277 | 0.1277 | 1.0000e-005 | 0.0000 | 0.1280 |

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

4.2 Trip Summary Information

| Land Use | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|----------|-------------------------|----------|--------|-------------|------------|
| | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Total | | | | | |

4.3 Trip Type Information

| Land Use | Miles | | | Trip % | | | Trip Purpose % | | |
|----------|------------|------------|-------------|------------|------------|-------------|----------------|----------|---------|
| | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 0.488429 | 0.036082 | 0.211732 | 0.154985 | 0.049882 | 0.007459 | 0.020077 | 0.014399 | 0.001917 | 0.002182 | 0.008131 | 0.001589 | 0.003135 |

5.0 Energy Detail

5.1 Fleet Mix

Historical Energy Use: N

5.1 Mitigation Measures Energy

5.2 Energy by Land Use - NaturalGas

Mitigated

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

5.3 Energy by Land Use - Electricity

Unmitigated

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

6.2 Area by SubCategory

Unmitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Mitigated

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|-----------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Total | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Vegetation
