

APPENDIX C

Air Quality and Greenhouse Gas Emissions Calculations

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 1: CONSTRUCTION EMISSIONS SUMMARY - Montaña de Oro S9 Cable Alignment (Full Project)

| Source | Peak Day Emissions, lbs/day | | | | | | | | | | Annual Emissions, tons/year | | | | | | | | | | MTCO ₂ e |
|--------------------------------------------|-----------------------------|------------------|-------------------|-------------|--------------|-----------------|---------------|------------------|-----------------|-----------------|-----------------------------|------------------|-------------------|------------------|-------------|-----------------|---------------|------------------|-----------------|-----------------|---------------------|
| | NOx+ROG | PM ₁₀ | PM _{2.5} | DPM | CO | SO ₂ | Fugitive Dust | N ₂ O | CH ₄ | CO ₂ | NOx+ROG | PM ₁₀ | PM _{2.5} | DPM | CO | SO ₂ | Fugitive Dust | N ₂ O | CH ₄ | CO ₂ | |
| Pre-Survey Montana de Oro | 148 | 0.953 | 0.953 | 0.953 | 1,910 | 0.0004 | 0.071 | 0.072 | 0.207 | 9,067 | 0.167 | 0.001 | 0.001 | 0.001 | 2.148 | 0.000 | 0.0001 | 0.0001 | 0.0002 | 10.2 | 9.30 |
| Near Shore Montana de Oro | 105 | 2.05 | 2.05 | 2.05 | 16.4 | 2.41 | 0.094 | 0.411 | 0.519 | 11,511 | 0.609 | 0.012 | 0.012 | 0.012 | 0.092 | 0.014 | 0.0001 | 0.002 | 0.003 | 66.7 | 61.2 |
| Offshore Montana de Oro | 1,932 | 38.4 | 37.3 | 38.4 | 230 | 42.2 | 0.000 | 5.43 | 5.75 | 153,602 | 13.80 | 0.276 | 0.268 | 0.276 | 1.639 | 0.303 | 0.0000 | 0.039 | 0.040 | 1091 | 1001 |
| Onshore Montana de Oro | 2.54 | 0.088 | 0.088 | 1.21 | 0.005 | 0.019 | 0.075 | 0.019 | 0.030 | 401 | 0.003 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.0001 | 0.000 | 0.000 | 0.401 | 0.369 |
| Peak Day Emissions, lb/day | 1,932 | 38.4 | 37.3 | 38.4 | 1,910 | 42.2 | 0.094 | 5.43 | 5.75 | 153,602 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Project Total Emissions, tons | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 14.58 | 0.289 | 0.281 | 0.289 | 3.88 | 0.318 | 0.0003 | 0.041 | 0.044 | 1169 | 1072 |
| Quarterly Emissions, tons | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 14.58 | 0.289 | 0.281 | 0.289 | 3.88 | 0.318 | 0.0003 | 0.041 | 0.044 | 1169 | 1072 |
| SLOAPCD Significance Thresholds | 137 | -- | -- | 7.0 | -- | -- | -- | -- | -- | -- | 2.5/6.3 | -- | -- | 0.13/0.32 | -- | -- | 2.25 | -- | -- | -- | -- |
| Threshold exceeded? | Yes | -- | -- | Yes | -- | -- | -- | -- | -- | -- | Yes/Yes | -- | -- | Yes/No | -- | -- | No | -- | -- | -- | -- |
| GHG - MTCO₂e conversions | | | | | | | | | | | | | | | | | | 273 | 27.9 | 1 | -- |
| Total MTCO₂e, tons/yr | | | | | | | | | | | | | | | | | | 1,072 | | | |

Notes:

- Global Warming Potentials (273 for N₂O, 27.9 for CH₄, and 1 for CO₂, Table 7.SM.6, Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report

SLOAPCD - San Luis Obispo Air Pollution Control District

MTCO₂e - Metric Tons of Carbon Dioxide Equivalent

NO_x - Oxides of Nitrogen

ROG - Reactive Organic Gases

PM_{2.5} - Particulate Matter 2.5 Microns or Less

PM₁₀ - Particulate Matter 10 Microns or Less

DPM - Diesel Particulate Matter

CO - Carbon Monoxide

SO₂ - Sulfur Dioxide

N₂O - Nitrous Oxide

CH₄ - Methane

CO₂ - Carbon Dioxide

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 3: Near Shore Montana de Oro - (Full Project)

On-Site Sources - Equipment Operations

| Source | BHP | Load Factor | Number | Hours/Day | Duration (days) | Emission Factors (g/bhp-hr) | | | | | | | | Peak Day Emissions (lbs/day) | | | | | | | | Total Emissions (tons) | | | | | | | | | | |
|--------------------------------------|-------|-------------|--------|-----------|-----------------|-----------------------------|-------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|------------------------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|------------------------|-----------------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|
| | | | | | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ |
| Diving Support Vessel Main-1 | 600 | 33.6 | 1 | 12 | 16 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 25.439 | 0.955 | 0.474 | 0.474 | 3.822 | 0.609 | 0.104 | 0.123 | 2823 | 0.204 | 0.008 | 0.004 | 0.004 | 0.031 | 0.005 | 0.001 | 0.001 | 22.580 |
| Diving Support Vessel Main-2 | 600 | 33.6 | 1 | 12 | 16 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 25.439 | 0.955 | 0.474 | 0.474 | 3.822 | 0.609 | 0.104 | 0.123 | 2823 | 0.204 | 0.008 | 0.004 | 0.004 | 0.031 | 0.005 | 0.001 | 0.001 | 22.580 |
| Diving Support Vessel Generator-1 | 80 | 32.2 | 1 | 12 | 16 | 4.258 | 0.164 | 0.166 | 0.166 | 0.828 | 0.127 | 0.018 | 0.026 | 588 | 2.902 | 0.112 | 0.113 | 0.113 | 0.564 | 0.086 | 0.012 | 0.018 | 400 | 0.023 | 0.001 | 0.001 | 0.001 | 0.005 | 0.001 | 0.000 | 0.000 | 3.204 |
| Diving Support Vessel Generator-2 | 80 | 32.2 | 1 | 12 | 16 | 4.019 | 0.149 | 0.167 | 0.167 | 0.694 | 0.127 | 0.016 | 0.026 | 588 | 2.739 | 0.102 | 0.114 | 0.114 | 0.473 | 0.086 | 0.011 | 0.018 | 400 | 0.022 | 0.001 | 0.001 | 0.001 | 0.004 | 0.001 | 0.000 | 0.000 | 3.204 |
| Generator | 25 | 74.0 | 1 | 12 | 6 | 4.426 | 0.697 | 0.178 | 0.178 | 2.390 | 0.007 | 0.004 | 0.062 | 568 | 2.166 | 0.341 | 0.087 | 0.087 | 1.170 | 0.003 | 0.002 | 0.030 | 278 | 0.006 | 0.001 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.834 |
| MV Grace | 1,520 | 66.6 | 1 | 0 | 0 | 7.830 | 0.393 | 0.243 | 0.223 | 0.820 | 0.299 | 0.022 | 0.007 | 490 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MV Grace Generator | 250 | 32.2 | 1 | 0 | 0 | 7.830 | 0.314 | 0.088 | 0.088 | 0.820 | 0.005 | 0.022 | 0.006 | 490 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Main-1 | 800 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Main-2 | 800 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Bow-1 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Bow-2 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Stern-1 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Stern-2 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-1 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-2 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-3 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-4 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| R/V Taku Main-1 | 300 | 100.0 | 1 | 0 | 0 | 5.820 | 3.530 | 0.060 | 0.060 | 120.3 | 0.000 | 0.004 | 0.013 | 568 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| R/V Taku Main-2 | 300 | 100.0 | 1 | 0 | 0 | 5.820 | 3.530 | 0.060 | 0.060 | 120.3 | 0.000 | 0.004 | 0.013 | 568 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Support Vessel/Anchor Handler Main-1 | 500 | 33.6 | 1 | 12 | 6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 21.199 | 0.796 | 0.395 | 0.395 | 3.185 | 0.508 | 0.086 | 0.103 | 2352 | 0.064 | 0.002 | 0.001 | 0.001 | 0.010 | 0.002 | 0.000 | 0.000 | 7.056 |
| Support Vessel/Anchor Handler Main-2 | 500 | 33.6 | 1 | 12 | 6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 21.199 | 0.796 | 0.395 | 0.395 | 3.185 | 0.508 | 0.086 | 0.103 | 2352 | 0.064 | 0.002 | 0.001 | 0.001 | 0.010 | 0.002 | 0.000 | 0.000 | 7.056 |
| Support Vessel/Tug Main-1 | 1,100 | 33.6 | 1 | 0 | 0 | 5.198 | 0.172 | 0.092 | 0.092 | 1.022 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Support Vessel/Tug Main-2 | 1,100 | 33.6 | 1 | 0 | 0 | 5.198 | 0.172 | 0.092 | 0.092 | 1.022 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Total | | | | | | 101.08 | 4.06 | 2.05 | 2.05 | 16.22 | 2.41 | 0.405 | 0.518 | 11428 | 0.586 | 0.023 | 0.012 | 0.012 | 0.092 | 0.014 | 0.002 | 0.003 | 66.51 | | | | | | | | | |

Offsite Onshore

San Luis Obispo County

| Vehicle | Peak Round Trips/Day | Average Round Trips/Day | Number of Vehicles | Length of Round Trip (miles) | Duration (days) | g/mile | | | | | | | | Peak Day Emissions (lbs/day) | | | | | | | | Total Emissions (tons) | | | | | | | | | |
|----------------------------------|----------------------|-------------------------|--------------------|------------------------------|-----------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|------------------------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|------------------------|-----------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|
| | | | | | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ |
| Light-Duty Passenger Van-Highway | 1 | 1 | 1 | 50 | 2 | 0.168 | 0.029 | 0.002 | 0.002 | 1.498 | 0.003 | 0.011 | 0.006 | 328.4 | 0.018 | 0.003 | 0.000 | 0.000 | 0.165 | 0.000 | 0.001 | 0.001 | 36.2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.036 |
| Light-Duty Truck Class 2-Highway | 1 | 1 | 2 | 25 | 6 | 0.053 | 0.009 | 0.005 | 0.005 | 0.094 | 0.003 | 0.045 | 0.000 | 282.8 | 0.006 | 0.001 | 0.001 | 0.001 | 0.010 | 0.000 | 0.005 | 0.000 | 31.2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.094 |
| Light-Duty Passenger Car-Highway | 1 | 1 | 1 | 25 | 6 | 0.045 | 0.008 | 0.001 | 0.001 | 0.657 | 0.003 | 0.005 | 0.002 | 270.0 | 0.003 | 0.000 | 0.000 | 0.000 | 0.036 | 0.000 | 0.000 | 0.000 | 14.9 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.045 |
| Total | | | | | | 0.027 | 0.005 | 0.001 | 0.001 | 0.212 | 0.001 | 0.006 | 0.001 | 82 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.174 | |

Offsite Onshore

San Luis Obispo County

| Source | Peak Round Trips/Day | Average Round Trips/Day | Number of Vehicles | Length of Round Trip (miles) | Duration (days) | Emission Factors (g/mile) | | Peak Day Emissions (lb/day) | | Total Emissions (tons) | |
|----------------------------------|----------------------|-------------------------|--------------------|------------------------------|-----------------|---------------------------|------------------------|-----------------------------|------------------------|------------------------|------------------------|
| | | | | | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| Light-Duty Passenger Van-Highway | 1 | 1 | 1 | 50 | 2 | 0.4276 | 0.1074 | 0.047130 | 0.0118366 | 0.000047 | 0.000012 |
| Light-Duty Truck Class 2-Highway | 1 | 1 | 1 | 25 | 2 | 0.4273 | 0.1073 | 0.023552 | 0.0059136 | 0.000024 | 0.000006 |
| Light-Duty Passenger Car-Highway | 1 | 1 | 1 | 25 | 2 | 0.4263 | 0.1069 | 0.023496 | 0.0058942 | 0.000023 | 0.000006 |
| Total | | | | | | 0.094178 | 0.023644 | 0.000094 | 0.000024 | | |

Notes:

- Hours per day and durations estimated or provided by client.
- Refer to Table 10 for emission and load factor sources.

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 6:Emission Factors and Assumptions - (Full Project)

| Onsite - Offshore | | | | Emission Factors(g/bhp-hr) | | | | | | | | | Emission Factors(lbs/bhp-hr) | | | | | | | | |
|--------------------------------------|------|------------------------|-------------|----------------------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|------------------------------|--------|------------------|-------------------|--------|-----------------|------------------|-----------------|-----------------|
| Source | Tier | Operational Horsepower | Load Factor | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ |
| Diving Support Vessel Main-1 | 3 | 600 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Diving Support Vessel Main-2 | 3 | 600 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Diving Support Vessel Generator-1 | 2 | 80 | 32.2 | 4.258 | 0.164 | 0.166 | 0.166 | 0.828 | 0.127 | 0.018 | 0.026 | 588 | 0.0094 | 0.0004 | 0.0004 | 0.0004 | 0.0018 | 0.00028 | 0.00004 | 0.00006 | 1.2955 |
| Diving Support Vessel Generator-2 | 2 | 80 | 32.2 | 4.019 | 0.149 | 0.167 | 0.167 | 0.694 | 0.127 | 0.016 | 0.026 | 588 | 0.0089 | 0.0003 | 0.0004 | 0.0004 | 0.0015 | 0.00028 | 0.00004 | 0.00006 | 1.2955 |
| Generator | -- | 25 | 74.0 | 4.426 | 0.697 | 0.178 | 0.178 | 2.390 | 0.007 | 0.0042 | 0.062 | 568 | 0.0098 | 0.0015 | 0.0004 | 0.0004 | 0.0053 | 0.00002 | 0.00001 | 0.00014 | 1.2529 |
| MV Grace | 1 | 1520 | 66.6 | 7.830 | 0.393 | 0.243 | 0.223 | 0.820 | 0.299 | 0.0216 | 0.007 | 490 | 0.0173 | 0.0009 | 0.0005 | 0.0005 | 0.0018 | 0.00066 | 0.00005 | 0.00002 | 1.0805 |
| MV Grace Generator | 2 | 250 | 32.2 | 7.830 | 0.314 | 0.088 | 0.088 | 0.820 | 0.005 | 0.0216 | 0.006 | 490 | 0.0173 | 0.0007 | 0.0002 | 0.0002 | 0.0018 | 0.00001 | 0.00005 | 0.00001 | 1.0805 |
| ROV Support Vessel Main-1 | 3 | 800 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Main-2 | 3 | 800 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Bow-1 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Bow-2 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Stern-1 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Stern-2 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-1 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-2 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-3 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-4 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| R/V Taku Main-1 | -- | 300 | 100.0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.0042 | 0.013 | 568 | 0.0128 | 0.0078 | 0.0001 | 0.0001 | 0.2652 | 0.00000 | 0.00001 | 0.00003 | 1.2529 |
| R/V Taku Main-2 | -- | 300 | 100.0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.0042 | 0.013 | 568 | 0.0128 | 0.0078 | 0.0001 | 0.0001 | 0.2652 | 0.00000 | 0.00001 | 0.00003 | 1.2529 |
| Support Vessel/Anchor Handler Main-1 | 3 | 500 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Anchor Handler Main-2 | 3 | 500 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Tug Main-1 | 2 | 1100 | 33.6 | 5.20 | 0.17 | 0.09 | 0.09 | 1.02 | 0.11 | 0.02 | 0.02 | 529 | 0.0115 | 0.0004 | 0.0002 | 0.0002 | 0.0023 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Tug Main-2 | 2 | 1100 | 33.6 | 5.20 | 0.17 | 0.09 | 0.09 | 1.02 | 0.11 | 0.02 | 0.02 | 529 | 0.0115 | 0.0004 | 0.0002 | 0.0002 | 0.0023 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |

Offsite Onshore - OnRoad
San Luis Obispo County

| Vehicle | Notes | g/mile | | | | | | | | | lbs/mile | | | | | | | | | |
|----------------------------------------|--------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|-----------------|---------|------------------|-------------------|---------|-----------------|------------------|-----------------|-----------------|---------|
| | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | |
| T7 Single Dump Class 8-Highway | 55 mph | 1.192 | 0.016 | 0.018 | 0.018 | 0.066 | 0.014 | 0.238 | 0.001 | 1510 | 0.00262 | 0.00003 | 0.00004 | 0.00004 | 0.00015 | 0.00003 | 0.00052 | 0.00000 | 0.00000 | 3.32245 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 1.723 | 0.019 | 0.008 | 0.007 | 0.158 | 0.016 | 0.259 | 0.001 | 1642 | 0.00379 | 0.00004 | 0.00002 | 0.00002 | 0.00035 | 0.00003 | 0.00057 | 0.00000 | 0.00000 | 3.61163 |
| T7 Tractor Class 8-Highway | 55 mph | 1.014 | 0.011 | 0.020 | 0.019 | 0.050 | 0.014 | 0.226 | 0.001 | 1432 | 0.00223 | 0.00002 | 0.00004 | 0.00004 | 0.00011 | 0.00003 | 0.00050 | 0.00000 | 0.00000 | 3.14996 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 1.667 | 0.014 | 0.007 | 0.007 | 0.134 | 0.015 | 0.244 | 0.001 | 1546 | 0.00367 | 0.00003 | 0.00002 | 0.00002 | 0.00030 | 0.00003 | 0.00054 | 0.00000 | 0.00000 | 3.40147 |
| T7 Utility Class 8-Highway | 55 mph | 0.674 | 0.008 | 0.011 | 0.011 | 0.040 | 0.014 | 0.234 | 0.000 | 1488 | 0.00148 | 0.00002 | 0.00002 | 0.00002 | 0.00009 | 0.00003 | 0.00052 | 0.00000 | 0.00000 | 3.27275 |
| T7 Utility Class 8-Non-Highway | 35 mph | 1.060 | 0.009 | 0.004 | 0.004 | 0.105 | 0.015 | 0.253 | 0.000 | 1603 | 0.00233 | 0.00002 | 0.00001 | 0.00001 | 0.00023 | 0.00003 | 0.00056 | 0.00000 | 0.00000 | 3.52719 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.775 | 0.009 | 0.014 | 0.013 | 0.041 | 0.014 | 0.239 | 0.000 | 1518 | 0.00171 | 0.00002 | 0.00003 | 0.00003 | 0.00009 | 0.00003 | 0.00053 | 0.00000 | 0.00000 | 3.33890 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 1.265 | 0.010 | 0.005 | 0.005 | 0.108 | 0.015 | 0.255 | 0.000 | 1617 | 0.00278 | 0.00002 | 0.00001 | 0.00001 | 0.00024 | 0.00003 | 0.00056 | 0.00000 | 0.00000 | 3.55668 |
| T6 Utility Class 6-Highway | 55 mph | 0.236 | 0.003 | 0.004 | 0.004 | 0.021 | 0.009 | 0.154 | 0.000 | 975 | 0.00052 | 0.00001 | 0.00001 | 0.00001 | 0.00005 | 0.00002 | 0.00034 | 0.00000 | 0.00000 | 2.14536 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.353 | 0.003 | 0.001 | 0.001 | 0.037 | 0.010 | 0.158 | 0.000 | 1004 | 0.00078 | 0.00001 | 0.00000 | 0.00000 | 0.00008 | 0.00002 | 0.00035 | 0.00000 | 0.00000 | 2.20926 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.053 | 0.009 | 0.005 | 0.005 | 0.094 | 0.003 | 0.045 | 0.000 | 283 | 0.00012 | 0.00002 | 0.00001 | 0.00001 | 0.00021 | 0.00001 | 0.00010 | 0.00000 | 0.00000 | 0.62221 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.058 | 0.016 | 0.006 | 0.006 | 0.157 | 0.003 | 0.047 | 0.001 | 300 | 0.00013 | 0.00003 | 0.00001 | 0.00001 | 0.00035 | 0.00001 | 0.00010 | 0.00000 | 0.00000 | 0.66019 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.168 | 0.029 | 0.002 | 0.002 | 1.498 | 0.003 | 0.011 | 0.006 | 328 | 0.00037 | 0.00006 | 0.00000 | 0.00000 | 0.00330 | 0.00001 | 0.00003 | 0.00001 | 0.00001 | 0.72258 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.173 | 0.038 | 0.002 | 0.002 | 1.972 | 0.003 | 0.012 | 0.008 | 317 | 0.00038 | 0.00008 | 0.00000 | 0.00000 | 0.00434 | 0.00001 | 0.00003 | 0.00002 | 0.00002 | 0.69635 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.045 | 0.008 | 0.001 | 0.001 | 0.657 | 0.003 | 0.005 | 0.002 | 270 | 0.00010 | 0.00002 | 0.00000 | 0.00000 | 0.00145 | 0.00001 | 0.00001 | 0.00000 | 0.00000 | 0.59402 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.049 | 0.010 | 0.001 | 0.001 | 0.880 | 0.003 | 0.005 | 0.003 | 260 | 0.00011 | 0.00002 | 0.00000 | 0.00000 | 0.00194 | 0.00001 | 0.00001 | 0.00001 | 0.00001 | 0.57179 |

Offsite Dust - OnRoad
San Luis Obispo County

| Source | Notes | Emission Factors (g/mile) | | Emission Factors (lb/mile) | |
|----------------------------------------|--------|---------------------------|------------------------|----------------------------|------------------------|
| | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| T7 Single Dump Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 0.5308 | 0.1435 | 0.001170 | 0.000316 |
| T7 Tractor Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T7 Utility Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Utility Class 8-Non-Highway | 35 mph | 0.5306 | 0.1435 | 0.001170 | 0.000316 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 0.5308 | 0.1435 | 0.001170 | 0.000316 |
| T6 Utility Class 6-Highway | 55 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.4273 | 0.1073 | 0.000942 | 0.000237 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.4371 | 0.1107 | 0.000964 | 0.000244 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.4276 | 0.1074 | 0.000943 | 0.000237 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.4379 | 0.1110 | 0.000965 | 0.000245 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.4263 | 0.1069 | 0.000940 | 0.000236 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.4359 | 0.1103 | 0.000961 | 0.000243 |

Offsite Onshore - OnRoad
Mendocino County

| Vehicle | Notes | g/mile | | | | | | | | | | lbs/mile | | | | | | | |
|----------------------------------------|--------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|-----------------|----------|------------------|-------------------|---------|-----------------|------------------|-----------------|-----------------|
| | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ |
| T7 Single Dump Class 8-Highway | 55 mph | 1.338 | 0.019 | 0.020 | 0.019 | 0.077 | 0.014 | 0.235 | 0.001 | 1493 | 0.00294 | 0.00004 | 0.00004 | 0.00004 | 0.00017 | 0.00003 | 0.00052 | 0.00000 | 3.28470 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 1.858 | 0.024 | 0.009 | 0.009 | 0.178 | 0.015 | 0.257 | 0.001 | 1632 | 0.00409 | 0.00005 | 0.00002 | 0.00002 | 0.00039 | 0.00003 | 0.00057 | 0.00000 | 3.59100 |
| T7 Tractor Class 8-Highway | 55 mph | 1.008 | 0.011 | 0.020 | 0.019 | 0.050 | 0.014 | 0.226 | 0.001 | 1432 | 0.00222 | 0.00002 | 0.00004 | 0.00004 | 0.00011 | 0.00003 | 0.00050 | 0.00000 | 3.15096 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 1.659 | 0.014 | 0.007 | 0.007 | 0.134 | 0.015 | 0.244 | 0.001 | 1547 | 0.00365 | 0.00003 | 0.00002 | 0.00002 | 0.00029 | 0.00003 | 0.00054 | 0.00000 | 3.40233 |
| T7 Utility Class 8-Highway | 55 mph | 0.676 | 0.008 | 0.011 | 0.011 | 0.040 | 0.014 | 0.234 | 0.000 | 1488 | 0.00149 | 0.00002 | 0.00002 | 0.00002 | 0.00009 | 0.00003 | 0.00052 | 0.00000 | 3.27321 |
| T7 Utility Class 8-Non-Highway | 35 mph | 1.061 | 0.009 | 0.004 | 0.004 | 0.106 | 0.015 | 0.253 | 0.000 | 1604 | 0.00233 | 0.00002 | 0.00001 | 0.00001 | 0.00023 | 0.00003 | 0.00056 | 0.00000 | 3.52874 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.592 | 0.007 | 0.014 | 0.013 | 0.032 | 0.015 | 0.241 | 0.000 | 1532 | 0.00130 | 0.00002 | 0.00003 | 0.00003 | 0.00007 | 0.00003 | 0.00053 | 0.00000 | 3.37000 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 1.088 | 0.008 | 0.005 | 0.004 | 0.093 | 0.015 | 0.255 | 0.000 | 1620 | 0.00239 | 0.00002 | 0.00001 | 0.00001 | 0.00020 | 0.00003 | 0.00056 | 0.00000 | 3.56497 |
| T6 Utility Class 6-Highway | 55 mph | 0.297 | 0.004 | 0.004 | 0.004 | 0.023 | 0.009 | 0.153 | 0.000 | 969 | 0.00065 | 0.00001 | 0.00001 | 0.00001 | 0.00005 | 0.00002 | 0.00034 | 0.00000 | 2.13118 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.422 | 0.004 | 0.002 | 0.002 | 0.041 | 0.010 | 0.158 | 0.000 | 1004 | 0.00093 | 0.00001 | 0.00000 | 0.00000 | 0.00009 | 0.00002 | 0.00035 | 0.00000 | 2.20971 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.229 | 0.016 | 0.009 | 0.009 | 0.181 | 0.003 | 0.046 | 0.001 | 291 | 0.00050 | 0.00004 | 0.00002 | 0.00002 | 0.00040 | 0.00001 | 0.00010 | 0.00000 | 0.63932 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.206 | 0.023 | 0.011 | 0.011 | 0.222 | 0.003 | 0.049 | 0.001 | 308 | 0.00045 | 0.00005 | 0.00002 | 0.00002 | 0.00049 | 0.00001 | 0.00011 | 0.00000 | 0.67836 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.287 | 0.050 | 0.002 | 0.002 | 2.335 | 0.003 | 0.018 | 0.011 | 338 | 0.00063 | 0.00011 | 0.00001 | 0.00000 | 0.00514 | 0.00001 | 0.00004 | 0.00002 | 0.74273 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.295 | 0.066 | 0.003 | 0.003 | 3.042 | 0.003 | 0.019 | 0.014 | 326 | 0.00065 | 0.00014 | 0.00001 | 0.00001 | 0.00669 | 0.00001 | 0.00004 | 0.00003 | 0.71637 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.058 | 0.010 | 0.001 | 0.001 | 0.757 | 0.003 | 0.006 | 0.003 | 273 | 0.00013 | 0.00002 | 0.00000 | 0.00000 | 0.00167 | 0.00001 | 0.00001 | 0.00001 | 0.60054 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.063 | 0.013 | 0.001 | 0.001 | 1.010 | 0.003 | 0.006 | 0.003 | 263 | 0.00014 | 0.00003 | 0.00000 | 0.00000 | 0.00222 | 0.00001 | 0.00001 | 0.00001 | 0.57786 |

Offsite Dust - OnRoad
Mendocino County

| Source | Notes | Emission Factors (g/mile) | | Emission Factors (lb/mile) | |
|----------------------------------------|--------|---------------------------|------------------------|----------------------------|------------------------|
| | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| T7 Single Dump Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 0.5309 | 0.1435 | 0.001170 | 0.000316 |
| T7 Tractor Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T7 Utility Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Utility Class 8-Non-Highway | 35 mph | 0.5306 | 0.1435 | 0.001170 | 0.000316 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.4920 | 0.1300 | 0.001085 | 0.000286 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T6 Utility Class 6-Highway | 55 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.4274 | 0.1073 | 0.000942 | 0.000237 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.4373 | 0.1108 | 0.000964 | 0.000244 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.4277 | 0.1074 | 0.000943 | 0.000237 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.4382 | 0.1111 | 0.000966 | 0.000245 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.4263 | 0.1069 | 0.000940 | 0.000236 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.4359 | 0.1103 | 0.000961 | 0.000243 |

Notes:

Emission Factors and load factors for construction equipment obtained from CalEEMod 2020, Appendix D, CalEEMod 2021, Appendix G.

Emission Factors and load factors for vessels and vessel generators obtained from Ports Emissions Inventory Guidance, EPA 2020

Emission factors for on-road vehicles obtained from EMFAC2021 (year 2023, aggregated model year).

N₂O emissions factors from obtained State and Federal Mandatory Reporting Rule, Table 6 and based on an average of N₂O offroad diesel engine emissions factors from obtained from CalEEMod 2022, Appendix G.

Horsepower for construction equipment and drilling generators obtained from client.

On-road trucks are assumed to be diesel powered and passenger cars are assumed to be gasoline powered.

PM₁₀ and PM_{2.5} emissions from brake wear and on-road dust is included in the emissions factors for On-road vehicles.

-- Not Available or Applicable.

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 1: CONSTRUCTION EMISSIONS SUMMARY - Manchester S8 and S9 Cable Alignments (Within 3 Nautical Miles)

| Source | Peak Day Emissions, lbs/day | | | | | | | | | | | Annual Emissions, tons/year | | | | | | | | | | | MTCO ₂ e |
|--------------------------------------------|-----------------------------|-------------|------------------|-------------------|-------------|--------------|-----------------|---------------|------------------|-----------------|-----------------|-----------------------------|--------------|------------------|-------------------|--------------|-------------|-----------------|---------------|------------------|-----------------|-----------------|---------------------|
| | NO _x | ROG | PM ₁₀ | PM _{2.5} | DPM | CO | SO ₂ | Fugitive Dust | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | DPM | CO | SO ₂ | Fugitive Dust | N ₂ O | CH ₄ | CO ₂ | |
| Pre-Survey Manchester | 92.4 | 56.0 | 0.955 | 0.954 | 0.955 | 1,910 | 0.01 | 0.14 | 0.08 | 0.21 | 9,115 | 0.116 | 0.070 | 0.0012 | 0.0012 | 0.001 | 2.39 | 0.0000 | 0.0002 | 0.0001 | 0.0003 | 11.4 | 10.4 |
| Near Shore Manchester | 101 | 4.07 | 2.05 | 2.05 | 2.05 | 16.9 | 2.41 | 0.24 | 0.42 | 0.52 | 11,597 | 0.527 | 0.021 | 0.011 | 0.011 | 0.011 | 0.085 | 0.013 | 0.0009 | 0.002 | 0.003 | 60.1 | 55.1 |
| Offshore Manchester | 621 | 28.4 | 15.94 | 14.90 | 15.94 | 74.4 | 18.31 | 0.00 | 1.80 | 0.90 | 42,862 | 1.86 | 0.085 | 0.0478 | 0.0447 | 0.048 | 0.223 | 0.055 | 0.00000 | 0.005 | 0.003 | 129 | 118 |
| Peak Day Emissions, lb/day | 621 | 56.0 | 15.9 | 14.9 | 15.9 | 1,910 | 18.3 | 0.235 | 1.80 | 0.904 | 42,862 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Project Total Emissions, tons | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 2.51 | 0.176 | 0.060 | 0.057 | 0.060 | 2.70 | 0.067 | 0.0011 | 0.008 | 0.006 | 200 | 184 |
| MCAQMD Significance Thresholds | 54 | 54 | 82 | 54 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Threshold exceeded? | Yes | Yes | No | No | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| GHG - MTCO₂e conversions | | | | | | | | | | | | | | | | | | | | 273 | 27.9 | 1 | -- |
| Total MTCO₂e, tons/yr | | | | | | | | | | | | | | | | | | | | 184 | | | |

Notes:
- Global Warming Potentials (273 for N₂O, 27.9 for CH₄, and 1 for CO₂, Table 7.SM.6, Intergovernmental Panel on Climate Change (IPCC). 2021. Sixth Assessment Report
MCAQMD - Mendocino County Air Quality Management District
MTCO₂e - Metric Tons of Carbon Dioxide Equivalent
NO_x - Oxides of Nitrogen
ROG - Reactive Organic Gases
PM_{2.5} - Particulate Matter 2.5 Microns or Less
PM₁₀ - Particulate Matter 10 Microns or Less
DPM - Diesel Particulate Matter
CO - Carbon Monoxide
SO₂ - Sulfur Dioxide
N₂O - Nitrous Oxide
CH₄ - Methane
CO₂ - Carbon Dioxide

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 3: Near Shore Manchester - (Within 3 Nautical Miles)
On-Site Sources - Equipment Operations

| Source | BHP | Load Factor | Number | Hours/Day | Duration (days) | Emission Factors (g/bhp-hr) | | | | | | | | Peak Day Emissions (lbs/day) | | | | | | | | Total Emissions (tons) | | | | | | | | | | |
|--------------------------------------|-------|-------------|--------|-----------|-----------------|-----------------------------|-------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|------------------------------|-----------------|-------------|------------------|-------------------|-------------|-----------------|------------------|------------------------|-----------------|-----------------|-------------|------------------|-------------------|-------------|-----------------|------------------|-----------------|-----------------|
| | | | | | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ |
| Diving Support Vessel Main-1 | 600 | 33.6 | 1 | 12 | 10 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 25.439 | 0.955 | 0.474 | 0.474 | 3.822 | 0.609 | 0.104 | 0.123 | 2822.5 | 0.127 | 0.005 | 0.002 | 0.002 | 0.019 | 0.003 | 0.001 | 0.001 | 14.113 |
| Diving Support Vessel Main-2 | 600 | 33.6 | 1 | 12 | 10 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 25.439 | 0.955 | 0.474 | 0.474 | 3.822 | 0.609 | 0.104 | 0.123 | 2822.5 | 0.127 | 0.005 | 0.002 | 0.002 | 0.019 | 0.003 | 0.001 | 0.001 | 14.113 |
| Diving Support Vessel Generator-1 | 80 | 32.2 | 1 | 12 | 10 | 4.258 | 0.164 | 0.166 | 0.166 | 0.828 | 0.127 | 0.018 | 0.026 | 588 | 2.902 | 0.112 | 0.113 | 0.113 | 0.564 | 0.086 | 0.012 | 0.018 | 400.4 | 0.015 | 0.001 | 0.001 | 0.001 | 0.003 | 0.000 | 0.000 | 0.000 | 2.002 |
| Diving Support Vessel Generator-2 | 80 | 32.2 | 1 | 12 | 10 | 4.019 | 0.149 | 0.167 | 0.167 | 0.694 | 0.127 | 0.016 | 0.026 | 588 | 2.739 | 0.102 | 0.114 | 0.114 | 0.473 | 0.086 | 0.011 | 0.018 | 400.4 | 0.014 | 0.001 | 0.001 | 0.001 | 0.002 | 0.000 | 0.000 | 0.000 | 2.002 |
| Generator | 25 | 74.0 | 1 | 12 | 10 | 4.426 | 0.697 | 0.178 | 0.178 | 2.390 | 0.007 | 0.004 | 0.062 | 568 | 2.166 | 0.341 | 0.087 | 0.087 | 1.170 | 0.003 | 0.002 | 0.030 | 278.1 | 0.011 | 0.002 | 0.000 | 0.000 | 0.006 | 0.000 | 0.000 | 0.000 | 1.391 |
| IMV Grace | 1,520 | 66.6 | 1 | 0 | 0 | 7.830 | 0.393 | 0.243 | 0.223 | 0.820 | 0.299 | 0.022 | 0.007 | 490 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| IMV Grace Generator | 250 | 32.2 | 1 | 0 | 0 | 7.830 | 0.314 | 0.088 | 0.088 | 0.820 | 0.005 | 0.022 | 0.006 | 490 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Main-1 | 800 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Main-2 | 800 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Bow-1 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Bow-2 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Stern-1 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Stern-2 | 500 | 50.0 | 1 | 0 | 0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-1 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-2 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-3 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| ROV Support Vessel Generator-4 | 1,676 | 32.2 | 1 | 0 | 0 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| R/V Taku Main-1 | 300 | 100.0 | 1 | 0 | 0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.004 | 0.013 | 568 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| R/V Taku Main-2 | 300 | 100.0 | 1 | 0 | 0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.004 | 0.013 | 568 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Support Vessel/Anchor Handler Main-1 | 500 | 33.6 | 1 | 12 | 11 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 21.20 | 0.796 | 0.395 | 0.395 | 3.185 | 0.508 | 0.086 | 0.103 | 2352.1 | 0.117 | 0.004 | 0.002 | 0.002 | 0.018 | 0.003 | 0.000 | 0.001 | 12.94 |
| Support Vessel/Anchor Handler Main-2 | 500 | 33.6 | 1 | 12 | 11 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 21.20 | 0.796 | 0.395 | 0.395 | 3.185 | 0.508 | 0.086 | 0.103 | 2352.1 | 0.117 | 0.004 | 0.002 | 0.002 | 0.018 | 0.003 | 0.000 | 0.001 | 12.94 |
| Support Vessel/Tug Main-1 | 1,100 | 33.6 | 1 | 0 | 0 | 5.198 | 0.172 | 0.092 | 0.092 | 1.022 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| Support Vessel/Tug Main-2 | 1,100 | 33.6 | 1 | 0 | 0 | 5.198 | 0.172 | 0.092 | 0.092 | 1.022 | 0.114 | 0.019 | 0.023 | 529 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total | | | | | | 101.08 | 4.06 | 2.05 | 2.05 | 16.22 | 2.41 | 0.40 | 0.52 | 11,428 | 0.53 | 0.02 | 0.01 | 0.01 | 0.08 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 59.49 | |

Offsite - Transportation to Field
San Joaquin Valley

| Vehicle | Peak Round Trips/Day | Average Round Trips/Day | Number of Vehicles | Length of Round Trip (miles) | Duration (days) | g/mile | | | | | | | | Peak Day Emissions (lbs/day) | | | | | | | | Total Emissions (tons) | | | | | | | | | | |
|----------------------------------|----------------------|-------------------------|--------------------|------------------------------|-----------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|------------------------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|------------------------|-----------------|-----------------|--------------|------------------|-------------------|--------------|-----------------|------------------|-----------------|-----------------|
| | | | | | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ |
| Light-Duty Passenger Van-Highway | 1 | 1 | 1 | 100 | 2 | 0.287 | 0.050 | 0.002 | 0.002 | 2.335 | 0.003 | 0.018 | 0.011 | 338 | 0.063 | 0.011 | 0.001 | 0.000 | 0.515 | 0.001 | 0.004 | 0.002 | 74.4 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.074 |
| Light-Duty Truck Class 2-Highway | 1 | 1 | 2 | 50 | 11 | 0.229 | 0.016 | 0.009 | 0.009 | 0.181 | 0.003 | 0.046 | 0.001 | 291 | 0.050 | 0.004 | 0.002 | 0.002 | 0.040 | 0.001 | 0.010 | 0.000 | 64.1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.352 |
| Light-Duty Passenger Car-Highway | 1 | 1 | 1 | 50 | 11 | 0.058 | 0.010 | 0.001 | 0.001 | 0.757 | 0.003 | 0.006 | 0.003 | 273.0 | 0.006 | 0.001 | 0.000 | 0.000 | 0.083 | 0.000 | 0.001 | 0.000 | 30.1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.165 |
| Total | | | | | | 0.120 | 0.016 | 0.003 | 0.003 | 0.638 | 0.002 | 0.015 | 0.003 | 169 | 0.000 | 0.000 | 0.000 | 0.000 | 0.638 | 0.002 | 0.015 | 0.003 | 169 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.592 |

Offsite Onshore
Mendocino County

| Source | Peak Round Trips/Day | Average Round Trips/Day | Number of Vehicles | Length of Round Trip (miles) | Duration (days) | Emission Factors (g/mile) | | Peak Day Emissions (lb/day) | | Total Emissions (tons) | |
|----------------------------------|----------------------|-------------------------|--------------------|------------------------------|-----------------|---------------------------|------------------------|-----------------------------|------------------------|------------------------|------------------------|
| | | | | | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| Light-Duty Passenger Van-Highway | 1 | 1 | 1 | 100 | 2 | 0.4277 | 0.1074 | 0.094282 | 0.02368072 | 0.000094 | 0.000024 |
| Light-Duty Truck Class 2-Highway | 1 | 1 | 2 | 50 | 11 | 0.4274 | 0.1073 | 0.094220 | 0.02365903 | 0.000518 | 0.000130 |
| Light-Duty Passenger Car-Highway | 1 | 1 | 1 | 50 | 11 | 0.4263 | 0.1069 | 0.046994 | 0.011788726 | 0.000258 | 0.000065 |
| Total | | | | | | 0.235496 | 0.059128 | 0.000871 | 0.000219 | | |

- Notes:**
- Hours per day and durations estimated or provided by client.
 - Refer to Table 10 for emission and load factor sources.
 - Offsite round trips are assumed to be from outside of Mendocino County.

AT&T Japan-U.S. Cable Network Decommissioning (S8 and S9 Cables)
CRITERIA POLLUTANTS & GREENHOUSE GAS EMISSIONS
TABLE 5: Emission Factors and Assumptions - (Within 3 Nautical Miles)

| Onsite - Offshore | | | | Emission Factors(g/bhp-hr) | | | | | | | | | Emission Factors(lbs/bhp-hr) | | | | | | | | |
|--------------------------------------|------|------------------------|-------------|----------------------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|------------------------------|--------|------------------|-------------------|--------|-----------------|------------------|-----------------|-----------------|
| Source | Tier | Operational Horsepower | Load Factor | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO ₂ | N ₂ O | CH ₄ | CO ₂ |
| Diving Support Vessel Main-1 | 3 | 600 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Diving Support Vessel Main-2 | 3 | 600 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Diving Support Vessel Generator-1 | 2 | 80 | 32.2 | 4.258 | 0.164 | 0.166 | 0.166 | 0.828 | 0.127 | 0.018 | 0.026 | 588 | 0.0094 | 0.0004 | 0.0004 | 0.0004 | 0.0018 | 0.00028 | 0.00004 | 0.00006 | 1.2955 |
| Diving Support Vessel Generator-2 | 2 | 80 | 32.2 | 4.019 | 0.149 | 0.167 | 0.167 | 0.694 | 0.127 | 0.016 | 0.026 | 588 | 0.0089 | 0.0003 | 0.0004 | 0.0004 | 0.0015 | 0.00028 | 0.00004 | 0.00006 | 1.2955 |
| Generator | -- | 25 | 74.0 | 4.426 | 0.697 | 0.178 | 0.178 | 2.390 | 0.007 | 0.0042 | 0.062 | 568 | 0.0098 | 0.0015 | 0.0004 | 0.0004 | 0.0053 | 0.00002 | 0.00001 | 0.00014 | 1.2529 |
| MV Grace | 1 | 1520 | 66.6 | 7.830 | 0.393 | 0.243 | 0.223 | 0.820 | 0.299 | 0.0216 | 0.007 | 490 | 0.0173 | 0.0009 | 0.0005 | 0.0005 | 0.0018 | 0.00066 | 0.00005 | 0.00002 | 1.0805 |
| MV Grace Generator | 2 | 250 | 32.2 | 7.830 | 0.314 | 0.088 | 0.088 | 0.820 | 0.005 | 0.0216 | 0.006 | 490 | 0.0173 | 0.0007 | 0.0002 | 0.0002 | 0.0018 | 0.00001 | 0.00005 | 0.00001 | 1.0805 |
| ROV Support Vessel Main-1 | 3 | 800 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Main-2 | 3 | 800 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Bow-1 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Bow-2 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Stern-1 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Stern-2 | 3 | 500 | 50.0 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-1 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-2 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-3 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| ROV Support Vessel Generator-4 | 2 | 1676 | 32.2 | 6.965 | 0.142 | 0.122 | 0.122 | 0.768 | 0.114 | 0.016 | 0.023 | 529 | 0.0154 | 0.0003 | 0.0003 | 0.0003 | 0.0017 | 0.00025 | 0.00003 | 0.00005 | 1.1656 |
| R/V Taku Main-1 | -- | 300 | 100.0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.0042 | 0.013 | 568 | 0.0128 | 0.0078 | 0.0001 | 0.0001 | 0.2652 | 0.00000 | 0.00001 | 0.00003 | 1.2529 |
| R/V Taku Main-2 | -- | 300 | 100.0 | 5.820 | 3.530 | 0.060 | 0.060 | 120 | 0.000 | 0.0042 | 0.013 | 568 | 0.0128 | 0.0078 | 0.0001 | 0.0001 | 0.2652 | 0.00000 | 0.00001 | 0.00003 | 1.2529 |
| Support Vessel/Anchor Handler Main-1 | 3 | 500 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Anchor Handler Main-2 | 3 | 500 | 33.6 | 4.765 | 0.179 | 0.089 | 0.089 | 0.716 | 0.114 | 0.019 | 0.023 | 529 | 0.0105 | 0.0004 | 0.0002 | 0.0002 | 0.0016 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Tug Main-1 | 2 | 1100 | 33.6 | 5.20 | 0.17 | 0.09 | 0.09 | 1.02 | 0.11 | 0.02 | 0.02 | 529 | 0.0115 | 0.0004 | 0.0002 | 0.0002 | 0.0023 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |
| Support Vessel/Tug Main-2 | 2 | 1100 | 33.6 | 5.20 | 0.17 | 0.09 | 0.09 | 1.02 | 0.11 | 0.02 | 0.02 | 529 | 0.0115 | 0.0004 | 0.0002 | 0.0002 | 0.0023 | 0.00025 | 0.00004 | 0.00005 | 1.1656 |

Offsite Onshore - OnRoad
San Luis Obispo County

| Vehicle | Notes | g/mile | | | | | | | | | lbs/mile | | | | | | | | |
|----------------------------------------|--------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|-----------------|---------|------------------|-------------------|---------|-----------------|------------------|-----------------|-----------------|
| | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ |
| T7 Single Dump Class 8-Highway | 55 mph | 1.192 | 0.016 | 0.018 | 0.018 | 0.066 | 0.014 | 0.238 | 0.001 | 1510 | 0.00262 | 0.00003 | 0.00004 | 0.00004 | 0.00015 | 0.00003 | 0.00052 | 0.00000 | 3.32245 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 1.723 | 0.019 | 0.008 | 0.007 | 0.158 | 0.016 | 0.259 | 0.001 | 1642 | 0.00379 | 0.00004 | 0.00002 | 0.00002 | 0.00035 | 0.00003 | 0.00057 | 0.00000 | 3.61163 |
| T7 Tractor Class 8-Highway | 55 mph | 1.014 | 0.011 | 0.020 | 0.019 | 0.050 | 0.014 | 0.226 | 0.001 | 1432 | 0.00223 | 0.00002 | 0.00004 | 0.00004 | 0.00011 | 0.00003 | 0.00050 | 0.00000 | 3.14996 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 1.667 | 0.014 | 0.007 | 0.007 | 0.134 | 0.015 | 0.244 | 0.001 | 1546 | 0.00367 | 0.00003 | 0.00002 | 0.00002 | 0.00030 | 0.00003 | 0.00054 | 0.00000 | 3.40147 |
| T7 Utility Class 8-Highway | 55 mph | 0.674 | 0.008 | 0.011 | 0.011 | 0.040 | 0.014 | 0.234 | 0.000 | 1488 | 0.00148 | 0.00002 | 0.00002 | 0.00002 | 0.00009 | 0.00003 | 0.00052 | 0.00000 | 3.27275 |
| T7 Utility Class 8-Non-Highway | 35 mph | 1.060 | 0.009 | 0.004 | 0.004 | 0.105 | 0.015 | 0.253 | 0.000 | 1603 | 0.00233 | 0.00002 | 0.00001 | 0.00001 | 0.00023 | 0.00003 | 0.00056 | 0.00000 | 3.52719 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.775 | 0.009 | 0.014 | 0.013 | 0.041 | 0.014 | 0.239 | 0.000 | 1518 | 0.00171 | 0.00002 | 0.00003 | 0.00003 | 0.00009 | 0.00003 | 0.00053 | 0.00000 | 3.33890 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 1.265 | 0.010 | 0.005 | 0.005 | 0.108 | 0.015 | 0.255 | 0.000 | 1617 | 0.00278 | 0.00002 | 0.00001 | 0.00001 | 0.00024 | 0.00003 | 0.00056 | 0.00000 | 3.55668 |
| T6 Utility Class 6-Highway | 55 mph | 0.236 | 0.003 | 0.004 | 0.004 | 0.021 | 0.009 | 0.154 | 0.000 | 975 | 0.00052 | 0.00001 | 0.00001 | 0.00001 | 0.00005 | 0.00002 | 0.00034 | 0.00000 | 2.14536 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.353 | 0.003 | 0.001 | 0.001 | 0.037 | 0.010 | 0.158 | 0.000 | 1004 | 0.00078 | 0.00001 | 0.00000 | 0.00000 | 0.00008 | 0.00002 | 0.00035 | 0.00000 | 2.20926 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.053 | 0.009 | 0.005 | 0.005 | 0.094 | 0.003 | 0.045 | 0.000 | 283 | 0.00012 | 0.00002 | 0.00001 | 0.00001 | 0.00021 | 0.00001 | 0.00010 | 0.00000 | 0.62221 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.058 | 0.016 | 0.006 | 0.006 | 0.157 | 0.003 | 0.047 | 0.001 | 300 | 0.00013 | 0.00003 | 0.00001 | 0.00001 | 0.00035 | 0.00001 | 0.00010 | 0.00000 | 0.66019 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.168 | 0.029 | 0.002 | 0.002 | 1.498 | 0.003 | 0.011 | 0.006 | 328 | 0.00037 | 0.00006 | 0.00000 | 0.00000 | 0.00330 | 0.00001 | 0.00003 | 0.00001 | 0.72258 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.173 | 0.038 | 0.002 | 0.002 | 1.972 | 0.003 | 0.012 | 0.008 | 317 | 0.00038 | 0.00008 | 0.00000 | 0.00000 | 0.00434 | 0.00001 | 0.00003 | 0.00002 | 0.69635 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.045 | 0.008 | 0.001 | 0.001 | 0.657 | 0.003 | 0.005 | 0.002 | 270 | 0.00010 | 0.00002 | 0.00000 | 0.00000 | 0.00145 | 0.00001 | 0.00001 | 0.00000 | 0.59402 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.049 | 0.010 | 0.001 | 0.001 | 0.880 | 0.003 | 0.005 | 0.003 | 260 | 0.00011 | 0.00002 | 0.00000 | 0.00000 | 0.00194 | 0.00001 | 0.00001 | 0.00001 | 0.57179 |

Offsite Dust - OnRoad
San Luis Obispo County

| Source | Notes | Emission Factors (g/mile) | | Emission Factors (lb/mile) | |
|----------------------------------------|--------|---------------------------|------------------------|----------------------------|------------------------|
| | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| T7 Single Dump Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 0.5308 | 0.1435 | 0.001170 | 0.000316 |
| T7 Tractor Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T7 Utility Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Utility Class 8-Non-Highway | 35 mph | 0.5306 | 0.1435 | 0.001170 | 0.000316 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 0.5308 | 0.1435 | 0.001170 | 0.000316 |
| T6 Utility Class 6-Highway | 55 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.4273 | 0.1073 | 0.000942 | 0.000237 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.4371 | 0.1107 | 0.000964 | 0.000244 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.4276 | 0.1074 | 0.000943 | 0.000237 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.4379 | 0.1110 | 0.000965 | 0.000245 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.4263 | 0.1069 | 0.000940 | 0.000236 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.4359 | 0.1103 | 0.000961 | 0.000243 |

Offsite Onshore - OnRoad
Mendocino County

| Vehicle | Notes | g/mile | | | | | | | | | | lbs/mile | | | | | | | |
|----------------------------------------|--------|-----------------|-------|------------------|-------------------|-------|-----------------|------------------|-----------------|-----------------|-----------------|----------|------------------|-------------------|---------|-----------------|------------------|-----------------|-----------------|
| | | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ | NO _x | ROG | PM ₁₀ | PM _{2.5} | CO | SO _x | N ₂ O | CH ₄ | CO ₂ |
| T7 Single Dump Class 8-Highway | 55 mph | 1.338 | 0.019 | 0.020 | 0.019 | 0.077 | 0.014 | 0.235 | 0.001 | 1493 | 0.00294 | 0.00004 | 0.00004 | 0.00004 | 0.00017 | 0.00003 | 0.00052 | 0.00000 | 3.28470 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 1.858 | 0.024 | 0.009 | 0.009 | 0.178 | 0.015 | 0.257 | 0.001 | 1632 | 0.00409 | 0.00005 | 0.00002 | 0.00002 | 0.00039 | 0.00003 | 0.00057 | 0.00000 | 3.59100 |
| T7 Tractor Class 8-Highway | 55 mph | 1.008 | 0.011 | 0.020 | 0.019 | 0.050 | 0.014 | 0.226 | 0.001 | 1432 | 0.00222 | 0.00002 | 0.00004 | 0.00004 | 0.00011 | 0.00003 | 0.00050 | 0.00000 | 3.15096 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 1.659 | 0.014 | 0.007 | 0.007 | 0.134 | 0.015 | 0.244 | 0.001 | 1547 | 0.00365 | 0.00003 | 0.00002 | 0.00002 | 0.00029 | 0.00003 | 0.00054 | 0.00000 | 3.40233 |
| T7 Utility Class 8-Highway | 55 mph | 0.676 | 0.008 | 0.011 | 0.011 | 0.040 | 0.014 | 0.234 | 0.000 | 1488 | 0.00149 | 0.00002 | 0.00002 | 0.00002 | 0.00009 | 0.00003 | 0.00052 | 0.00000 | 3.27321 |
| T7 Utility Class 8-Non-Highway | 35 mph | 1.061 | 0.009 | 0.004 | 0.004 | 0.106 | 0.015 | 0.253 | 0.000 | 1604 | 0.00233 | 0.00002 | 0.00001 | 0.00001 | 0.00023 | 0.00003 | 0.00056 | 0.00000 | 3.52874 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.592 | 0.007 | 0.014 | 0.013 | 0.032 | 0.015 | 0.241 | 0.000 | 1532 | 0.00130 | 0.00002 | 0.00003 | 0.00003 | 0.00007 | 0.00003 | 0.00053 | 0.00000 | 3.37000 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 1.088 | 0.008 | 0.005 | 0.004 | 0.093 | 0.015 | 0.255 | 0.000 | 1620 | 0.00239 | 0.00002 | 0.00001 | 0.00001 | 0.00020 | 0.00003 | 0.00056 | 0.00000 | 3.56497 |
| T6 Utility Class 6-Highway | 55 mph | 0.297 | 0.004 | 0.004 | 0.004 | 0.023 | 0.009 | 0.153 | 0.000 | 969 | 0.00065 | 0.00001 | 0.00001 | 0.00001 | 0.00005 | 0.00002 | 0.00034 | 0.00000 | 2.13118 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.422 | 0.004 | 0.002 | 0.002 | 0.041 | 0.010 | 0.158 | 0.000 | 1004 | 0.00093 | 0.00001 | 0.00000 | 0.00000 | 0.00009 | 0.00002 | 0.00035 | 0.00000 | 2.20971 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.229 | 0.016 | 0.009 | 0.009 | 0.181 | 0.003 | 0.046 | 0.001 | 291 | 0.00050 | 0.00004 | 0.00002 | 0.00002 | 0.00040 | 0.00001 | 0.00010 | 0.00000 | 0.63932 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.206 | 0.023 | 0.011 | 0.011 | 0.222 | 0.003 | 0.049 | 0.001 | 308 | 0.00045 | 0.00005 | 0.00002 | 0.00002 | 0.00049 | 0.00001 | 0.00011 | 0.00000 | 0.67836 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.287 | 0.050 | 0.002 | 0.002 | 2.335 | 0.003 | 0.018 | 0.011 | 338 | 0.00063 | 0.00011 | 0.00001 | 0.00000 | 0.00514 | 0.00001 | 0.00004 | 0.00002 | 0.74273 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.295 | 0.066 | 0.003 | 0.003 | 3.042 | 0.003 | 0.019 | 0.014 | 326 | 0.00065 | 0.00014 | 0.00001 | 0.00001 | 0.00669 | 0.00001 | 0.00004 | 0.00003 | 0.71637 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.058 | 0.010 | 0.001 | 0.001 | 0.757 | 0.003 | 0.006 | 0.003 | 273 | 0.00013 | 0.00002 | 0.00000 | 0.00000 | 0.00167 | 0.00001 | 0.00001 | 0.00001 | 0.60054 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.063 | 0.013 | 0.001 | 0.001 | 1.010 | 0.003 | 0.006 | 0.003 | 263 | 0.00014 | 0.00003 | 0.00000 | 0.00000 | 0.00222 | 0.00001 | 0.00001 | 0.00001 | 0.57786 |

Offsite Dust - OnRoad
Mendocino County

| Source | Notes | Emission Factors (g/mile) | | Emission Factors (lb/mile) | |
|----------------------------------------|--------|---------------------------|------------------------|----------------------------|------------------------|
| | | PM ₁₀ Dust | PM _{2.5} Dust | PM ₁₀ Dust | PM _{2.5} Dust |
| T7 Single Dump Class 8-Highway | 55 mph | 0.4921 | 0.1300 | 0.001085 | 0.000287 |
| T7 Single Dump Class 8-Non-Highway | 35 mph | 0.5309 | 0.1435 | 0.001170 | 0.000316 |
| T7 Tractor Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Tractor Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T7 Utility Class 8-Highway | 55 mph | 0.4920 | 0.1299 | 0.001085 | 0.000286 |
| T7 Utility Class 8-Non-Highway | 35 mph | 0.5306 | 0.1435 | 0.001170 | 0.000316 |
| T7 Single Concrete Class 8-Highway | 55 mph | 0.4920 | 0.1300 | 0.001085 | 0.000286 |
| T7 Single Concrete Class 8-Non-Highway | 35 mph | 0.5307 | 0.1435 | 0.001170 | 0.000316 |
| T6 Utility Class 6-Highway | 55 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| T6 Utility Class 6-Non-Highway | 35 mph | 0.4642 | 0.1202 | 0.001023 | 0.000265 |
| Light-Duty Truck Class 2-Highway | 55 mph | 0.4274 | 0.1073 | 0.000942 | 0.000237 |
| Light-Duty Truck Class 2-Non-Highway | 35 mph | 0.4373 | 0.1108 | 0.000964 | 0.000244 |
| Light-Duty Passenger Van-Highway | 55 mph | 0.4277 | 0.1074 | 0.000943 | 0.000237 |
| Light-Duty Passenger Non-Van-Highway | 35 mph | 0.4382 | 0.1111 | 0.000966 | 0.000245 |
| Light-Duty Passenger Car-Highway | 55 mph | 0.4263 | 0.1069 | 0.000940 | 0.000236 |
| Light-Duty Passenger Car-Non-Highway | 35 mph | 0.4359 | 0.1103 | 0.000961 | 0.000243 |

Notes:

Emission Factors and load factors for construction equipment obtained from CalEEMod 2020, Appendix D, CalEEMod 2021, Appendix G.
Emission Factors and load factors for vessels and vessel generators obtained from Ports Emissions Inventory Guidance, EPA 2020
Emission factors for on-road vehicles obtained from EMFAC2021 (year 2023, aggregated model year).
N₂O emissions factors from obtained State and Federal Mandatory Reporting Rule, Table 6 and based on an average of N₂O offroad diesel engine emissions factors from obtained from CalEEMod 2022, Appendix G.
Horsepower for construction equipment and drilling generators obtained from client.
On-road trucks are assumed to be diesel powered and passenger cars are assumed to be gasoline powered.
PM₁₀ and PM_{2.5} emissions from brake wear and on-road dust is included in the emissions factors for On-road vehicles.

-- Not Available or Applicable.