San Jose B - Skyline Terminal Location - Metcalf HVDC Tier 4 Final Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	San Jose B - Skyline Terminal Location - Metcalf HVDC Tier 4 Final
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	1.60
Location	37.339980180212095, -121.90106721139239
County	Santa Clara
City	San Jose
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1850
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

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

User Defined Industrial	1.00	User Defined Unit	13.8	10,000	0.00	—	—	Electrical Substation no buildings

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.72	36.8	89.7	0.17	0.86	7.50	7.88	0.81	3.20	3.58	—	18,452	18,452	0.76	0.27	18,553
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.91	48.5	111	0.21	1.12	0.88	2.00	1.05	0.22	1.27	—	22,414	22,414	0.92	0.34	22,538
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.45	13.6	43.9	0.08	0.32	2.06	2.38	0.30	0.85	1.15	—	8,950	8,950	0.37	0.13	8,998
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.26	2.49	8.01	0.02	0.06	0.38	0.43	0.06	0.15	0.21	—	1,482	1,482	0.06	0.02	1,490

2.2. Construction Emissions by Year, Unmitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.72	36.8	89.7	0.17	0.86	7.50	7.88	0.81	3.20	3.58	—	18,452	18,452	0.76	0.27	18,553
2027	1.17	11.2	26.9	0.05	0.24	0.21	0.45	0.22	0.05	0.28	—	5,245	5,245	0.21	0.09	5,278
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.91	48.5	111	0.21	1.12	0.88	2.00	1.05	0.22	1.27	—	22,414	22,414	0.92	0.34	22,538
2027	4.76	47.1	111	0.21	1.03	0.88	1.91	0.97	0.22	1.18	—	22,385	22,385	0.91	0.34	22,508
2028	1.13	11.0	26.8	0.05	0.21	0.21	0.42	0.20	0.05	0.25	—	5,225	5,225	0.21	0.09	5,257
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.45	13.6	43.9	0.08	0.32	2.06	2.38	0.30	0.85	1.15	—	8,950	8,950	0.37	0.13	8,998
2027	0.96	9.29	22.1	0.04	0.20	0.17	0.37	0.19	0.04	0.23	—	4,345	4,345	0.18	0.07	4,372
2028	0.10	0.99	2.41	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.02	—	470	470	0.02	0.01	473
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.26	2.49	8.01	0.02	0.06	0.38	0.43	0.06	0.15	0.21	—	1,482	1,482	0.06	0.02	1,490
2027	0.18	1.70	4.04	0.01	0.04	0.03	0.07	0.03	0.01	0.04	—	719	719	0.03	0.01	724
2028	0.02	0.18	0.44	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	77.9	77.9	< 0.005	< 0.005	78.4

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	20.1	20.1	< 0.005	< 0.005	20.4
Area	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	18.9	18.9	< 0.005	< 0.005	19.1
Area	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989

Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	19.0	19.0	< 0.005	< 0.005	19.3
Area	0.28	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	0.89
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.15	3.15	< 0.005	< 0.005	3.20
Area	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	162	162	0.03	< 0.005	164
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

3. Construction Emissions Details

3.1. PGE Demolition at SanJoseB (2026) - Unmitigated

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

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

Off-Road Equipment	0.40	3.00	14.9	0.03	0.09	—	0.09	0.09	—	0.09	—	3,072	3,072	0.12	0.02	3,082
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.45	2.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	463	463	0.02	< 0.005	464
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.08	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.6	76.6	< 0.005	< 0.005	76.9
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.49	9.49	< 0.005	< 0.005	9.63
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	20.0	20.0	< 0.005	< 0.005	20.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.57	1.57	< 0.005	< 0.005	1.59
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.31	3.31	< 0.005	< 0.005	3.46
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Road Work, Site and Staging Preparation (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.44	11.7	73.3	0.14	0.28	—	0.28	0.28	—	0.28	—	14,349	14,349	0.58	0.12	14,399
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	2.95	18.5	0.03	0.07	—	0.07	0.07	—	0.07	—	3,617	3,617	0.15	0.03	3,629
Dust From Material Movement	—	—	—	—	—	1.78	1.78	—	0.78	0.78	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.54	3.37	0.01	0.01	—	0.01	0.01	—	0.01	—	599	599	0.02	< 0.005	601
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.14	0.14	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	171
Vendor	0.02	0.82	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.7	39.7	< 0.005	< 0.005	40.3
Vendor	< 0.005	0.21	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	167	167	0.01	0.02	175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	6.67
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	28.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Below Grade Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	18.3	46.9	0.10	0.48	—	0.48	0.45	—	0.45	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.77	18.3	46.9	0.10	0.48	—	0.48	0.45	—	0.45	—	10,626	10,626	0.43	0.09	10,663
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	4.61	11.8	0.03	0.12	—	0.12	0.11	—	0.11	—	2,670	2,670	0.11	0.02	2,679
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.84	2.15	< 0.005	0.02	—	0.02	0.02	—	0.02	—	442	442	0.02	< 0.005	444
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.49	0.24	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	398	398	0.02	0.06	417
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.52	0.25	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	398	398	0.02	0.06	416
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.4	59.4	< 0.005	< 0.005	60.2
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	99.9	99.9	0.01	0.01	105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.83	9.83	< 0.005	< 0.005	9.97
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	17.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Below Grade Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	17.8	46.9	0.10	0.46	—	0.46	0.43	—	0.43	—	10,627	10,627	0.43	0.09	10,664
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.63	1.65	< 0.005	0.02	—	0.02	0.02	—	0.02	—	374	374	0.02	< 0.005	376
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.30	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	62.0	62.0	< 0.005	< 0.005	62.2
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.49	0.24	< 0.005	0.01	0.11	0.11	0.01	0.03	0.03	—	390	390	0.02	0.06	408
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.17	8.17	< 0.005	< 0.005	8.29
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	14.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	1.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.27	2.27	< 0.005	< 0.005	2.38
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Above Grade Construction (2026) - Unmitigated

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

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

Off-Road Equipment	1.75	17.5	35.3	0.06	0.37	—	0.37	0.35	—	0.35	—	5,413	5,413	0.22	0.04	5,431
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.75	17.5	35.3	0.06	0.37	—	0.37	0.35	—	0.35	—	5,413	5,413	0.22	0.04	5,431
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	4.41	8.87	0.01	0.09	—	0.09	0.09	—	0.09	—	1,360	1,360	0.06	0.01	1,365
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.80	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	225	225	0.01	< 0.005	226
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	278
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237

Vendor	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.4	59.4	< 0.005	< 0.005	60.2
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.6	66.6	< 0.005	0.01	69.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.83	9.83	< 0.005	< 0.005	9.97
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. Above Grade Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.67	17.1	35.2	0.06	0.32	—	0.32	0.30	—	0.30	—	5,413	5,413	0.22	0.04	5,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.60	1.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	191	191	0.01	< 0.005	191

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.6	31.6	< 0.005	< 0.005	31.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.17	8.17	< 0.005	< 0.005	8.29
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.15	9.15	< 0.005	< 0.005	9.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	1.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	1.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. PGE Upgrades SanJoseB Sub. (2026) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16	11.1	26.2	0.05	0.26	—	0.26	0.24	—	0.24	—	4,809	4,809	0.20	0.04	4,825
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.67	1.59	< 0.005	0.02	—	0.02	0.01	—	0.01	—	292	292	0.01	< 0.005	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	0.29	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	48.3	48.3	< 0.005	< 0.005	48.5
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	117	117	< 0.005	0.01	118
Vendor	0.01	0.42	0.20	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	318	318	0.02	0.05	333
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.17	7.17	< 0.005	< 0.005	7.27
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.3	19.3	< 0.005	< 0.005	20.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	1.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.20	3.20	< 0.005	< 0.005	3.34
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. PGE Upgrades SanJoseB Sub. (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	10.8	26.2	0.05	0.23	—	0.23	0.22	—	0.22	—	4,809	4,809	0.20	0.04	4,826
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	10.8	26.2	0.05	0.23	—	0.23	0.22	—	0.22	—	4,809	4,809	0.20	0.04	4,826
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	7.72	18.7	0.03	0.17	—	0.17	0.16	—	0.16	—	3,435	3,435	0.14	0.03	3,447
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	1.41	3.41	0.01	0.03	—	0.03	0.03	—	0.03	—	569	569	0.02	< 0.005	571
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	126
Vendor	0.01	0.38	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	327
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	116
Vendor	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.32	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.8	82.8	< 0.005	< 0.005	84.0
Vendor	0.01	0.28	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	223	223	0.01	0.03	233
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	13.9
Vendor	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	36.9	36.9	< 0.005	0.01	38.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.17. PGE Upgrades SanJoseB Sub. (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.08	10.6	26.1	0.05	0.21	—	0.21	0.20	—	0.20	—	4,808	4,808	0.20	0.04	4,825
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.95	2.35	< 0.005	0.02	—	0.02	0.02	—	0.02	—	433	433	0.02	< 0.005	434
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.7	71.7	< 0.005	< 0.005	71.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	114
Vendor	0.01	0.38	0.18	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	304	304	0.02	0.04	318
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.3	10.3	< 0.005	< 0.005	10.4
Vendor	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.4	27.4	< 0.005	< 0.005	28.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.70	1.70	< 0.005	< 0.005	1.72
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.53	4.53	< 0.005	< 0.005	4.74
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

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

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164
Total	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Total	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Total	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
PGE Demolition at SanJoseB	Demolition	7/1/2026	9/15/2026	5.00	55.0	Demolish infrastructure no longer needed at PGE location
Road Work, Site and Staging Preparation	Site Preparation	6/1/2026	9/15/2026	6.00	92.0	Road Work, Site and Staging Preparation
Below Grade Construction	Grading	9/16/2026	1/15/2027	6.00	105	—
Above Grade Construction	Building Construction	9/16/2026	1/15/2027	6.00	105	—
PGE Upgrades SanJoseB Sub.	Building Construction	12/1/2026	2/15/2028	5.00	316	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

PGE Demolition at SanJoseB	Cranes	Diesel	Tier 4 Final	1.00	10.0	260	0.07
PGE Demolition at SanJoseB	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.10
PGE Demolition at SanJoseB	Excavators	Diesel	Tier 4 Final	1.00	8.00	70.0	0.19
PGE Demolition at SanJoseB	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	5.00	415	0.19
PGE Demolition at SanJoseB	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.18
PGE Demolition at SanJoseB	Trenchers	Diesel	Average	1.00	5.00	40.0	0.25
PGE Demolition at SanJoseB	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	10.0	300	0.30
PGE Demolition at SanJoseB	Excavators	Diesel	Average	1.00	8.00	275	0.11
PGE Demolition at SanJoseB	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	175	0.15
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.30
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	5.00	415	0.30
Road Work, Site and Staging Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	250	0.33
Road Work, Site and Staging Preparation	Rollers	Diesel	Tier 4 Final	2.00	8.00	405	0.30
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	70.0	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	640	0.02
Road Work, Site and Staging Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.30

Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.05
Road Work, Site and Staging Preparation	Scrapers	Diesel	Tier 4 Final	1.00	6.00	407	0.43
Road Work, Site and Staging Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	170	0.12
Road Work, Site and Staging Preparation	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.70
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Below Grade Construction	Excavators	Diesel	Average	2.00	8.00	275	0.34
Below Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	4.00	100	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	5.00	68.0	0.28
Below Grade Construction	Excavators	Diesel	Tier 4 Final	2.00	8.00	70.0	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.28
Below Grade Construction	Bore/Drill Rigs	Diesel	Average	2.00	8.00	275	0.30
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.28
Below Grade Construction	Trenchers	Diesel	Average	2.00	5.00	75.0	0.38
Below Grade Construction	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.28
Below Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
Above Grade Construction	Welders	Diesel	Average	2.00	6.00	395	0.23
Above Grade Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.26

Above Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.36
Above Grade Construction	Forklifts	Diesel	Average	2.00	8.00	130	0.18
Above Grade Construction	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.26
Above Grade Construction	Aerial Lifts	Diesel	Average	2.00	8.00	74.0	0.23
Above Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
PGE Upgrades SanJoseB Sub.	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	11.0	300	0.36
PGE Upgrades SanJoseB Sub.	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	5.00	415	0.08
PGE Upgrades SanJoseB Sub.	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.01
PGE Upgrades SanJoseB Sub.	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.11
PGE Upgrades SanJoseB Sub.	Excavators	Diesel	Average	1.00	8.00	275	0.11
PGE Upgrades SanJoseB Sub.	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	5.00	68.0	0.18
PGE Upgrades SanJoseB Sub.	Excavators	Diesel	Tier 4 Final	1.00	8.00	70.0	0.19
PGE Upgrades SanJoseB Sub.	Bore/Drill Rigs	Diesel	Average	1.00	8.00	275	0.10
PGE Upgrades SanJoseB Sub.	Trenchers	Diesel	Average	1.00	5.00	75.0	0.10
PGE Upgrades SanJoseB Sub.	Rollers	Diesel	Tier 4 Final	2.00	3.00	405	0.04
PGE Upgrades SanJoseB Sub.	Cranes	Diesel	Tier 4 Final	1.00	8.00	250	0.17
PGE Upgrades SanJoseB Sub.	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	8.00	130	0.20

PGE Upgrades SanJoseB Sub.	Forklifts	Diesel	Average	1.00	8.00	130	0.10
PGE Upgrades SanJoseB Sub.	Aerial Lifts	Diesel	Average	2.00	8.00	49.0	0.15
PGE Upgrades SanJoseB Sub.	Aerial Lifts	Diesel	Average	1.00	8.00	74.0	0.15
PGE Upgrades SanJoseB Sub.	Welders	Diesel	Average	1.00	6.00	395	0.23
PGE Upgrades SanJoseB Sub.	Generator Sets	Diesel	Tier 4 Final	1.00	10.0	45.0	0.59

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Road Work, Site and Staging Preparation	—	—	—	—
Road Work, Site and Staging Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Road Work, Site and Staging Preparation	Vendor	25.0	8.40	HHDT,MHDT
Road Work, Site and Staging Preparation	Hauling	0.00	20.0	HHDT
Road Work, Site and Staging Preparation	Onsite truck	—	—	HHDT
Below Grade Construction	—	—	—	—
Below Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Below Grade Construction	Vendor	15.0	8.40	HHDT,MHDT
Below Grade Construction	Hauling	0.00	20.0	HHDT
Below Grade Construction	Onsite truck	—	—	HHDT
Above Grade Construction	—	—	—	—

Above Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Above Grade Construction	Vendor	10.0	8.40	HHDT,MHDT
Above Grade Construction	Hauling	0.00	20.0	HHDT
Above Grade Construction	Onsite truck	—	—	HHDT
PGE Demolition at SanJoseB	—	—	—	—
PGE Demolition at SanJoseB	Worker	8.00	11.7	LDA,LDT1,LDT2
PGE Demolition at SanJoseB	Vendor	5.00	8.40	HHDT,MHDT
PGE Demolition at SanJoseB	Hauling	0.00	20.0	HHDT
PGE Demolition at SanJoseB	Onsite truck	—	—	HHDT
PGE Upgrades SanJoseB Sub.	—	—	—	—
PGE Upgrades SanJoseB Sub.	Worker	15.0	11.7	LDA,LDT1,LDT2
PGE Upgrades SanJoseB Sub.	Vendor	12.0	8.40	HHDT,MHDT
PGE Upgrades SanJoseB Sub.	Hauling	0.00	20.0	HHDT
PGE Upgrades SanJoseB Sub.	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

PGE Demolition at SanJoseB	0.00	0.00	0.00	—	—
Road Work, Site and Staging Preparation	—	—	155	0.00	—
Below Grade Construction	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.74	2.74	2.74	1,000	27.4	27.4	27.4	10,000

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	1,752,000	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	1	1	1	2

Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	34.6
AQ-DPM	90.0
Drinking Water	22.7
Lead Risk Housing	44.6
Pesticides	11.9
Toxic Releases	34.1
Traffic	76.0
Effect Indicators	—
CleanUp Sites	94.5

Groundwater	99.3
Haz Waste Facilities/Generators	96.7
Impaired Water Bodies	43.8
Solid Waste	0.00
Sensitive Population	—
Asthma	49.9
Cardio-vascular	36.5
Low Birth Weights	54.6
Socioeconomic Factor Indicators	—
Education	46.8
Housing	11.6
Linguistic	21.4
Poverty	43.7
Unemployment	51.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	55.19055563
Employed	58.62953933
Median HI	81.39355832
Education	—
Bachelor's or higher	73.95098165
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—

Auto Access	47.37585012
Active commuting	90.4914667
Social	—
2-parent households	11.45900167
Voting	75.23418452
Neighborhood	—
Alcohol availability	18.09316053
Park access	81.35506224
Retail density	91.00474785
Supermarket access	81.04709355
Tree canopy	65.73848325
Housing	—
Homeownership	37.76466059
Housing habitability	66.9190299
Low-inc homeowner severe housing cost burden	86.48787373
Low-inc renter severe housing cost burden	61.86321057
Uncrowded housing	85.268831
Health Outcomes	—
Insured adults	60.5800077
Arthritis	94.2
Asthma ER Admissions	43.5
High Blood Pressure	93.3
Cancer (excluding skin)	80.0
Asthma	61.7
Coronary Heart Disease	91.8
Chronic Obstructive Pulmonary Disease	88.0
Diagnosed Diabetes	89.0

Life Expectancy at Birth	93.2
Cognitively Disabled	25.4
Physically Disabled	86.7
Heart Attack ER Admissions	64.5
Mental Health Not Good	62.3
Chronic Kidney Disease	90.3
Obesity	55.2
Pedestrian Injuries	58.7
Physical Health Not Good	77.4
Stroke	91.3
Health Risk Behaviors	—
Binge Drinking	13.6
Current Smoker	63.1
No Leisure Time for Physical Activity	76.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	88.7
Elderly	98.6
English Speaking	91.1
Foreign-born	40.7
Outdoor Workers	37.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	10.3
Traffic Density	68.6
Traffic Access	87.4
Other Indices	—

Hardship	28.6
Other Decision Support	—
2016 Voting	71.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	51.0
Healthy Places Index Score for Project Location (b)	78.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 10172023 List
Construction: Off-Road Equipment	San Jose B Construction from Construction Activity Input 101723
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet

Operations: Energy Use	200 kW load so 1,752,000 kWH

Monterey- Metcalf Terminal Location - Metcalf HVDC Tier4 Final Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Monterey- Metcalf Terminal Location - Metcalf HVDC Tier4 Final
Construction Start Date	6/1/2026
Operational Year	2028
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	34.4
Location	37.22067491854513, -121.73856716733097
County	Santa Clara
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1907
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

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

User Defined Industrial	1.00	User Defined Unit	13.8	10,000	0.00	—	—	Electrical Substation no buildings

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.08	24.1	63.1	0.13	0.40	7.49	7.81	0.38	3.20	3.51	—	13,549	13,549	0.55	0.21	13,630
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.41	27.3	75.6	0.15	0.48	0.78	1.27	0.46	0.19	0.65	—	16,011	16,011	0.65	0.26	16,103
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	9.48	26.5	0.06	0.18	2.05	2.23	0.17	0.85	1.02	—	5,834	5,834	0.24	0.10	5,871
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	1.73	4.84	0.01	0.03	0.37	0.41	0.03	0.15	0.19	—	966	966	0.04	0.02	972

2.2. Construction Emissions by Year, Unmitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.08	24.1	63.1	0.13	0.40	7.49	7.81	0.38	3.20	3.51	—	13,549	13,549	0.55	0.21	13,630
2027	0.35	3.05	12.9	0.02	0.08	0.12	0.20	0.08	0.03	0.11	—	2,502	2,502	0.10	0.04	2,517
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.41	27.3	75.6	0.15	0.48	0.78	1.27	0.46	0.19	0.65	—	16,011	16,011	0.65	0.26	16,103
2027	2.39	26.8	75.4	0.15	0.47	0.78	1.25	0.45	0.19	0.64	—	15,989	15,989	0.65	0.25	16,081
2028	0.35	3.05	12.8	0.02	0.08	0.12	0.20	0.07	0.03	0.10	—	2,488	2,488	0.10	0.04	2,503
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.86	9.48	26.5	0.06	0.18	2.05	2.23	0.17	0.85	1.02	—	5,834	5,834	0.24	0.10	5,871
2027	0.32	3.02	11.4	0.02	0.07	0.11	0.18	0.07	0.03	0.09	—	2,259	2,259	0.09	0.04	2,272
2028	0.03	0.27	1.15	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	224	224	0.01	< 0.005	225
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.16	1.73	4.84	0.01	0.03	0.37	0.41	0.03	0.15	0.19	—	966	966	0.04	0.02	972
2027	0.06	0.55	2.07	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.02	—	374	374	0.02	0.01	376
2028	0.01	0.05	0.21	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	37.1	37.1	< 0.005	< 0.005	37.3

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	20.1	20.1	< 0.005	< 0.005	20.4
Area	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.32	0.01	0.51	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	1,001	1,001	0.16	0.02	1,011
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	18.9	18.9	< 0.005	< 0.005	19.1
Area	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989

Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	998	998	0.16	0.02	1,008
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.07	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	—	19.0	19.0	< 0.005	< 0.005	19.3
Area	0.28	< 0.005	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.88	0.88	< 0.005	< 0.005	0.89
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	979	979	0.16	0.02	989
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.29	0.01	0.28	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	0.00	999	999	0.16	0.02	1,009
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.15	3.15	< 0.005	< 0.005	3.20
Area	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	162	162	0.03	< 0.005	164
Water	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Waste	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	165	165	0.03	< 0.005	167

3. Construction Emissions Details

3.1. PG&E Distribution Line Removal at Metcalf Terminal (2026) - Unmitigated

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

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

Off-Road Equipment	0.14	0.71	7.37	0.01	0.03	—	0.03	0.03	—	0.03	—	1,431	1,431	0.06	0.01	1,436
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	129	129	0.01	< 0.005	130
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	21.4	21.4	< 0.005	< 0.005	21.5
Demolition	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.5	79.5	< 0.005	0.01	83.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.70	5.70	< 0.005	< 0.005	5.78
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.19	7.19	< 0.005	< 0.005	7.52
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.94	0.94	< 0.005	< 0.005	0.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.19	1.19	< 0.005	< 0.005	1.25
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. Road Work, Site and Staging Preparation (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	11.1	34.1	0.07	0.26	—	0.26	0.25	—	0.25	—	7,178	7,178	0.29	0.06	7,202
Dust From Material Movement	—	—	—	—	—	7.06	7.06	—	3.09	3.09	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	2.80	8.58	0.02	0.06	—	0.06	0.06	—	0.06	—	1,809	1,809	0.07	0.01	1,815
Dust From Material Movement	—	—	—	—	—	1.78	1.78	—	0.78	0.78	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.51	1.57	< 0.005	0.01	—	0.01	0.01	—	0.01	—	300	300	0.01	< 0.005	301
Dust From Material Movement	—	—	—	—	—	0.32	0.32	—	0.14	0.14	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	168	168	< 0.005	0.01	171
Vendor	0.02	0.82	0.40	< 0.005	0.01	0.18	0.19	0.01	0.05	0.06	—	663	663	0.04	0.10	694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.16	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.7	39.7	< 0.005	< 0.005	40.3
Vendor	< 0.005	0.21	0.10	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	—	167	167	0.01	0.02	175
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	6.67
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.7	27.7	< 0.005	< 0.005	28.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. Below Grade Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	14.4	29.1	0.07	0.27	—	0.27	0.26	—	0.26	—	6,996	6,996	0.28	0.06	7,020
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	14.4	29.1	0.07	0.27	—	0.27	0.26	—	0.26	—	6,996	6,996	0.28	0.06	7,020
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	3.62	7.31	0.02	0.07	—	0.07	0.06	—	0.06	—	1,758	1,758	0.07	0.01	1,764
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.66	1.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	291	291	0.01	< 0.005	292
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.46	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	371	371	0.02	0.05	389
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237
Vendor	0.01	0.49	0.23	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	371	371	0.02	0.05	388
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.4	59.4	< 0.005	< 0.005	60.2
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	93.3	93.3	0.01	0.01	97.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.83	9.83	< 0.005	< 0.005	9.97
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	16.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. Below Grade Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	14.0	29.1	0.07	0.26	—	0.26	0.25	—	0.25	—	6,997	6,997	0.28	0.06	7,022
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.49	1.02	< 0.005	0.01	—	0.01	0.01	—	0.01	—	246	246	0.01	< 0.005	247
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.09	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	40.8	40.8	< 0.005	< 0.005	40.9
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.46	0.22	< 0.005	0.01	0.10	0.10	0.01	0.03	0.03	—	364	364	0.02	0.05	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.17	8.17	< 0.005	< 0.005	8.29
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	13.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	1.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.12	2.12	< 0.005	< 0.005	2.22
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. Above Grade Construction (2026) - Unmitigated

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

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

Off-Road Equipment	0.66	8.80	31.3	0.06	0.12	—	0.12	0.12	—	0.12	—	5,413	5,413	0.22	0.04	5,431
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	8.80	31.3	0.06	0.12	—	0.12	0.12	—	0.12	—	5,413	5,413	0.22	0.04	5,431
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	2.21	7.86	0.01	0.03	—	0.03	0.03	—	0.03	—	1,360	1,360	0.06	0.01	1,365
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.40	1.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	225	225	0.01	< 0.005	226
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	1.14	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	252	252	< 0.005	0.01	256
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	278
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	234	234	0.01	0.01	237

Vendor	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.4	59.4	< 0.005	< 0.005	60.2
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	66.6	66.6	< 0.005	0.01	69.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.83	9.83	< 0.005	< 0.005	9.97
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	11.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. Above Grade Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	8.79	31.3	0.06	0.12	—	0.12	0.12	—	0.12	—	5,413	5,413	0.22	0.04	5,432
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.31	1.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	191	191	0.01	< 0.005	191

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.06	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	31.6	31.6	< 0.005	< 0.005	31.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.91	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	229	229	0.01	0.01	232
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.17	8.17	< 0.005	< 0.005	8.29
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.15	9.15	< 0.005	< 0.005	9.58
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	1.37
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.52	1.52	< 0.005	< 0.005	1.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. PG&E Metcalf Substation Upgrades and Connection (2026) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.91	12.4	0.02	0.08	—	0.08	0.07	—	0.07	—	2,288	2,288	0.09	0.02	2,295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.18	0.75	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	139	139	0.01	< 0.005	139
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.0	23.0	< 0.005	< 0.005	23.1
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.9	77.9	< 0.005	< 0.005	79.0
Vendor	< 0.005	0.17	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	133	133	0.01	0.02	139
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.78	4.78	< 0.005	< 0.005	4.85
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.04	8.04	< 0.005	< 0.005	8.41
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	0.80
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	1.39
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. PG&E Metcalf Substation Upgrades and Connection (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.88	12.4	0.02	0.08	—	0.08	0.07	—	0.07	—	2,289	2,289	0.09	0.02	2,297
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.88	12.4	0.02	0.08	—	0.08	0.07	—	0.07	—	2,289	2,289	0.09	0.02	2,297
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.23	2.05	8.89	0.02	0.06	—	0.06	0.05	—	0.05	—	1,635	1,635	0.07	0.01	1,641
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.38	1.62	< 0.005	0.01	—	0.01	0.01	—	0.01	—	271	271	0.01	< 0.005	272
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.5	82.5	< 0.005	< 0.005	83.8
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	76.5	76.5	< 0.005	< 0.005	77.5
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	130	130	0.01	0.02	136
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.2	55.2	< 0.005	< 0.005	56.0
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	92.8	92.8	0.01	0.01	97.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.14	9.14	< 0.005	< 0.005	9.28
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.4	15.4	< 0.005	< 0.005	16.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.17. PG&E Metcalf Substation Upgrades and Connection (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	2.87	12.4	0.02	0.08	—	0.08	0.07	—	0.07	—	2,286	2,286	0.09	0.02	2,294
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.26	1.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	206	206	0.01	< 0.005	207
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.05	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	34.1	34.1	< 0.005	< 0.005	34.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.03	0.02	0.29	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	75.1	75.1	< 0.005	< 0.005	76.2
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	127	127	0.01	0.02	132
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.84	6.84	< 0.005	< 0.005	6.94
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	11.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.13	1.13	< 0.005	< 0.005	1.15
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.89	1.89	< 0.005	< 0.005	1.97
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.19. PG&E Distribution Line to the Metcalf Terminal (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	1.98	7.21	0.02	0.06	—	0.06	0.05	—	0.05	—	1,979	1,979	0.08	0.02	1,986
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.12	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	119	119	< 0.005	< 0.005	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.7	19.7	< 0.005	< 0.005	19.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	79.5	79.5	< 0.005	0.01	83.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	3.85
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.80	4.80	< 0.005	< 0.005	5.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.63	0.63	< 0.005	< 0.005	0.64
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.79	0.79	< 0.005	< 0.005	0.83
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Total	—	—	—	—	—	—	—	—	—	—	—	979	979	0.16	0.02	989
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164
Total	—	—	—	—	—	—	—	—	—	—	—	162	162	0.03	< 0.005	164

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.07	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Total	0.31	< 0.005	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.79	1.79	< 0.005	< 0.005	1.79
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15
Total	0.05	< 0.005	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.15	0.15	< 0.005	< 0.005	0.15

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	0.00

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
PG&E Distribution Line Removal at Metcalf Terminal	Demolition	7/1/2026	8/15/2026	5.00	33.0	—
Road Work, Site and Staging Preparation	Site Preparation	6/1/2026	9/15/2026	6.00	92.0	Road Work, Site and Staging Preparation
Below Grade Construction	Grading	9/16/2026	1/15/2027	6.00	105	—
Above Grade Construction	Building Construction	9/16/2026	1/15/2027	6.00	105	—
PG&E Metcalf Substation Upgrades and Connection	Building Construction	12/1/2026	2/15/2028	5.00	316	—
PG&E Distribution Line to the Metcalf Terminal	Building Construction	8/16/2026	9/15/2026	5.00	22.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
PG&E Distribution Line Removal at Metcalf Terminal	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.28
PG&E Distribution Line Removal at Metcalf Terminal	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.20
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	275	0.30
Road Work, Site and Staging Preparation	Off-Highway Trucks	Diesel	Tier 4 Final	6.00	5.00	415	0.30

Road Work, Site and Staging Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	250	0.33
Road Work, Site and Staging Preparation	Rollers	Diesel	Tier 4 Final	2.00	8.00	405	0.30
Road Work, Site and Staging Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	70.0	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	640	0.02
Road Work, Site and Staging Preparation	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.30
Road Work, Site and Staging Preparation	Off-Highway Tractors	Diesel	Tier 4 Final	1.00	8.00	525	0.05
Road Work, Site and Staging Preparation	Scrapers	Diesel	Tier 4 Final	1.00	6.00	407	0.43
Road Work, Site and Staging Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	170	0.12
Road Work, Site and Staging Preparation	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.70
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	10.0	300	0.36
Below Grade Construction	Excavators	Diesel	Average	2.00	8.00	275	0.34
Below Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	4.00	100	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	5.00	68.0	0.28
Below Grade Construction	Excavators	Diesel	Tier 4 Final	2.00	8.00	70.0	0.28
Below Grade Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	275	0.28
Below Grade Construction	Bore/Drill Rigs	Diesel	Average	2.00	8.00	275	0.30
Below Grade Construction	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.28

Below Grade Construction	Trenchers	Diesel	Tier 4 Final	2.00	5.00	75.0	0.38
Below Grade Construction	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.28
Below Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
Above Grade Construction	Welders	Diesel	Tier 4 Final	2.00	6.00	395	0.23
Above Grade Construction	Cranes	Diesel	Tier 4 Final	2.00	8.00	250	0.26
Above Grade Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.36
Above Grade Construction	Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.18
Above Grade Construction	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.26
Above Grade Construction	Aerial Lifts	Diesel	Average	2.00	8.00	74.0	0.23
Above Grade Construction	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.74
PG&E Metcalf Substation Upgrades and Connection	Aerial Lifts	Diesel	Average	1.00	10.0	49.0	0.22
PG&E Metcalf Substation Upgrades and Connection	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	10.0	130	0.24
PG&E Metcalf Substation Upgrades and Connection	Excavators	Diesel	Tier 4 Final	1.00	5.00	70.0	0.27
PG&E Metcalf Substation Upgrades and Connection	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	5.00	275	0.27
PG&E Metcalf Substation Upgrades and Connection	Bore/Drill Rigs	Diesel	Average	2.00	8.00	125	0.25

PG&E Metcalf Substation Upgrades and Connection	Welders	Diesel	Tier 4 Final	1.00	6.00	395	0.23
PG&E Distribution Line to the Metcalf Terminal	Bore/Drill Rigs	Diesel	Average	1.00	8.00	275	0.15
PG&E Distribution Line to the Metcalf Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	4.00	415	0.11
PG&E Distribution Line to the Metcalf Terminal	Cranes	Diesel	Tier 4 Final	1.00	8.00	250	0.17
PG&E Distribution Line to the Metcalf Terminal	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	2.00	130	0.20
PG&E Distribution Line to the Metcalf Terminal	Aerial Lifts	Diesel	Average	2.00	8.00	175	0.15
PG&E Distribution Line to the Metcalf Terminal	Off-Highway Trucks	Diesel	Tier 4 Final	1.00	8.00	175	0.11

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Road Work, Site and Staging Preparation	—	—	—	—
Road Work, Site and Staging Preparation	Worker	20.0	11.7	LDA,LDT1,LDT2
Road Work, Site and Staging Preparation	Vendor	25.0	8.40	HHDT,MHDT
Road Work, Site and Staging Preparation	Hauling	0.00	20.0	HHDT
Road Work, Site and Staging Preparation	Onsite truck	—	—	HHDT
Below Grade Construction	—	—	—	—
Below Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2

Below Grade Construction	Vendor	14.0	8.40	HHDT,MHDT
Below Grade Construction	Hauling	0.00	20.0	HHDT
Below Grade Construction	Onsite truck	—	—	HHDT
Above Grade Construction	—	—	—	—
Above Grade Construction	Worker	30.0	11.7	LDA,LDT1,LDT2
Above Grade Construction	Vendor	10.0	8.40	HHDT,MHDT
Above Grade Construction	Hauling	0.00	20.0	HHDT
Above Grade Construction	Onsite truck	—	—	HHDT
PG&E Distribution Line Removal at Metcalf Terminal	—	—	—	—
PG&E Distribution Line Removal at Metcalf Terminal	Worker	8.00	11.7	LDA,LDT1,LDT2
PG&E Distribution Line Removal at Metcalf Terminal	Vendor	3.00	8.40	HHDT,MHDT
PG&E Distribution Line Removal at Metcalf Terminal	Hauling	0.00	20.0	HHDT
PG&E Distribution Line Removal at Metcalf Terminal	Onsite truck	—	—	HHDT
PG&E Metcalf Substation Upgrades and Connection	—	—	—	—
PG&E Metcalf Substation Upgrades and Connection	Worker	10.0	11.7	LDA,LDT1,LDT2
PG&E Metcalf Substation Upgrades and Connection	Vendor	5.00	8.40	HHDT,MHDT
PG&E Metcalf Substation Upgrades and Connection	Hauling	0.00	20.0	HHDT
PG&E Metcalf Substation Upgrades and Connection	Onsite truck	—	—	HHDT
PG&E Distribution Line to the Metcalf Terminal	—	—	—	—
PG&E Distribution Line to the Metcalf Terminal	Worker	8.00	11.7	LDA,LDT1,LDT2

PG&E Distribution Line to the Metcalf Terminal	Vendor	3.00	8.40	HHDT,MHDT
PG&E Distribution Line to the Metcalf Terminal	Hauling	0.00	20.0	HHDT
PG&E Distribution Line to the Metcalf Terminal	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
PG&E Distribution Line Removal at Metcalf Terminal	0.00	0.00	0.00	—	—
Road Work, Site and Staging Preparation	—	—	155	0.00	—
Below Grade Construction	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Industrial	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.74	2.74	2.74	1,000	27.4	27.4	27.4	10,000

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	15,000	5,000	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
User Defined Industrial	1,752,000	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	15.3	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	16.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	32.1
AQ-PM	7.54
AQ-DPM	16.2
Drinking Water	54.0
Lead Risk Housing	33.7
Pesticides	88.9
Toxic Releases	18.8
Traffic	70.7
Effect Indicators	—
CleanUp Sites	7.71
Groundwater	40.8
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	58.7
Solid Waste	83.3
Sensitive Population	—
Asthma	24.9
Cardio-vascular	39.8
Low Birth Weights	18.2
Socioeconomic Factor Indicators	—

Education	66.8
Housing	24.9
Linguistic	64.4
Poverty	37.0
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.89965354
Employed	19.97946875
Median HI	74.83639163
Education	—
Bachelor's or higher	39.1505197
High school enrollment	100
Preschool enrollment	4.709354549
Transportation	—
Auto Access	72.44963429
Active commuting	50.44270499
Social	—
2-parent households	70.69164635
Voting	86.1157449
Neighborhood	—
Alcohol availability	90.97908379
Park access	16.92544591
Retail density	17.41306301

Supermarket access	9.662517644
Tree canopy	53.06043886
Housing	—
Homeownership	66.77787758
Housing habitability	66.08494803
Low-inc homeowner severe housing cost burden	94.37957141
Low-inc renter severe housing cost burden	15.38560246
Uncrowded housing	48.81303734
Health Outcomes	—
Insured adults	46.18247145
Arthritis	50.5
Asthma ER Admissions	71.2
High Blood Pressure	53.6
Cancer (excluding skin)	49.7
Asthma	61.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	50.7
Diagnosed Diabetes	39.3
Life Expectancy at Birth	20.7
Cognitively Disabled	64.4
Physically Disabled	50.9
Heart Attack ER Admissions	58.4
Mental Health Not Good	52.8
Chronic Kidney Disease	45.1
Obesity	42.9
Pedestrian Injuries	82.5
Physical Health Not Good	47.6

Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	57.8
No Leisure Time for Physical Activity	49.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	69.7
Elderly	24.3
English Speaking	56.3
Foreign-born	50.8
Outdoor Workers	7.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	92.9
Traffic Density	64.2
Traffic Access	55.9
Other Indices	—
Hardship	35.6
Other Decision Support	—
2016 Voting	73.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	54.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No

Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 10172023 List
Construction: Off-Road Equipment	Metcalf Terminal Construction from Construction Activity Input 101723
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet
Operations: Energy Use	Load is 200kW... total 1752000 kWh per year

Metcalf Transmission Line Work Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Metcalf Transmission Line Work
Construction Start Date	6/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	34.4
Location	37.22067491854513, -121.73856716733097
County	Santa Clara
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1907
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
User Defined Linear	14.0	Mile	17.0	0.00	0.00	—	—	Transmission Lines (UnderGround)

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.88	34.9	97.3	0.25	1.02	1.25	2.26	0.96	0.32	1.28	—	28,410	28,410	1.18	0.63	28,634
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.93	39.1	108	0.26	1.02	1.67	2.69	0.97	0.43	1.40	—	29,559	29,559	1.24	0.74	29,811
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.55	25.9	71.1	0.18	0.75	0.88	1.63	0.71	0.23	0.93	—	20,519	20,519	0.86	0.45	20,677
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.65	4.73	13.0	0.03	0.14	0.16	0.30	0.13	0.04	0.17	—	3,397	3,397	0.14	0.07	3,423

2.2. Construction Emissions by Year, Unmitigated

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

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

2026	4.48	32.3	82.0	0.22	0.99	1.05	2.03	0.93	0.27	1.20	—	24,748	24,748	1.03	0.52	24,936
2027	4.88	34.9	97.3	0.25	1.02	1.25	2.26	0.96	0.32	1.28	—	28,410	28,410	1.18	0.63	28,634
2028	1.12	11.3	26.0	0.06	0.18	0.84	1.03	0.16	0.22	0.38	—	6,729	6,729	0.28	0.26	6,819
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.46	32.5	81.7	0.22	0.99	1.05	2.03	0.93	0.27	1.20	—	24,715	24,715	1.03	0.52	24,897
2027	4.93	39.1	108	0.26	1.02	1.67	2.69	0.97	0.43	1.40	—	29,559	29,559	1.24	0.74	29,811
2028	2.67	22.3	55.2	0.13	0.49	1.00	1.49	0.45	0.25	0.71	—	14,860	14,860	0.61	0.39	14,990
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.72	12.4	30.1	0.08	0.38	0.40	0.78	0.35	0.10	0.46	—	9,347	9,347	0.39	0.20	9,418
2027	3.55	25.9	71.1	0.18	0.75	0.88	1.63	0.71	0.23	0.93	—	20,519	20,519	0.86	0.45	20,677
2028	0.67	6.73	15.5	0.03	0.11	0.45	0.56	0.10	0.11	0.21	—	3,944	3,944	0.16	0.15	3,994
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.31	2.26	5.49	0.02	0.07	0.07	0.14	0.06	0.02	0.08	—	1,547	1,547	0.06	0.03	1,559
2027	0.65	4.73	13.0	0.03	0.14	0.16	0.30	0.13	0.04	0.17	—	3,397	3,397	0.14	0.07	3,423
2028	0.12	1.23	2.83	0.01	0.02	0.08	0.10	0.02	0.02	0.04	—	653	653	0.03	0.02	661

3. Construction Emissions Details

3.1. 500 kV Transmission Line Construction (HVAC) - Cable Install (2027) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.54	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	123	123	0.01	< 0.005	124
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.4	20.4	< 0.005	< 0.005	20.5
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.2	61.2	< 0.005	< 0.005	62.0

Vendor	0.01	0.40	0.19	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	312	312	0.02	0.05	326
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.50	4.50	< 0.005	< 0.005	4.57
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.7	22.7	< 0.005	< 0.005	23.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.75	0.75	< 0.005	< 0.005	0.76
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.76	3.76	< 0.005	< 0.005	3.93
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.3. 500 kV Transmission Line Construction (HVAC) - Cable Install (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.97	7.36	0.02	0.06	—	0.06	0.05	—	0.05	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.32	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.01	< 0.005	184
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.3	30.3	< 0.005	< 0.005	30.4
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.1	60.1	< 0.005	< 0.005	60.9
Vendor	0.01	0.38	0.18	< 0.005	< 0.005	0.08	0.09	< 0.005	0.02	0.03	—	304	304	0.02	0.04	318
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.57	6.57	< 0.005	< 0.005	6.66
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.9	32.9	< 0.005	< 0.005	34.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	1.10

Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	5.69
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.5. 320 kV Transmission Line Construction (HVDC) - Survey / Potholing (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.01	1.45	0.01	0.04	—	0.04	0.03	—	0.03	—	722	722	0.03	0.01	725

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.18	0.26	< 0.005	0.01	—	0.01	0.01	—	0.01	—	120	120	< 0.005	< 0.005	120
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.53	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	< 0.005	120
Vendor	0.01	0.26	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	0.01	0.03	222
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	111
Vendor	0.01	0.28	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	212	212	0.01	0.03	222
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.4	55.4	< 0.005	< 0.005	56.2
Vendor	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	107	107	0.01	0.02	112
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.17	9.17	< 0.005	< 0.005	9.31
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	18.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.7. 320 kV Transmission Line Construction (HVDC) - Survey / Potholing (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.57	0.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	456	456	0.02	< 0.005	457

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.10	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	75.5	75.5	< 0.005	< 0.005	75.7
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.50	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	117
Vendor	0.01	0.25	0.12	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	0.01	0.03	218
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	108
Vendor	0.01	0.26	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	208	208	0.01	0.03	217
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	34.3	34.3	< 0.005	< 0.005	34.8
Vendor	< 0.005	0.08	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	65.9	65.9	< 0.005	0.01	69.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.68	5.68	< 0.005	< 0.005	5.76
Vendor	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	11.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.9. 320 kV Transmission Line Construction (HVDC) - Trenchless Crossings (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	3.78	15.0	0.03	0.08	—	0.08	0.08	—	0.08	—	3,140	3,140	0.13	0.03	3,151
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	3.78	15.0	0.03	0.08	—	0.08	0.08	—	0.08	—	3,140	3,140	0.13	0.03	3,151
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.93	3.70	0.01	0.02	—	0.02	0.02	—	0.02	—	774	774	0.03	0.01	777

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.17	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	128	128	0.01	< 0.005	129
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.8	57.8	< 0.005	< 0.005	58.7
Vendor	0.02	0.63	0.31	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	519	519	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	54.2
Vendor	0.02	0.66	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	520	520	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	13.5
Vendor	< 0.005	0.16	0.08	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	128	128	0.01	0.02	134
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.21	2.21	< 0.005	< 0.005	2.24
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.2	21.2	< 0.005	< 0.005	22.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.11. 320 kV Transmission Line Construction (HVDC) - Vaults (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.78	14.6	0.04	0.18	—	0.18	0.17	—	0.17	—	4,010	4,010	0.16	0.03	4,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	5.78	14.6	0.04	0.18	—	0.18	0.17	—	0.17	—	4,010	4,010	0.16	0.03	4,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.50	6.30	0.02	0.08	—	0.08	0.07	—	0.07	—	1,733	1,733	0.07	0.01	1,739

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.46	1.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	288
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.61	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	135	135	< 0.005	0.01	137
Vendor	0.03	1.31	0.64	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,060	1,060	0.06	0.16	1,111
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.52	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	125	125	< 0.005	0.01	126
Vendor	0.03	1.39	0.65	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,061	1,061	0.06	0.16	1,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.4	54.4	< 0.005	< 0.005	55.2
Vendor	0.01	0.59	0.28	< 0.005	0.01	0.12	0.13	0.01	0.03	0.04	—	458	458	0.03	0.07	479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.01	9.01	< 0.005	< 0.005	9.14
Vendor	< 0.005	0.11	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	75.9	75.9	< 0.005	0.01	79.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.13. 320 kV Transmission Line Construction (HVDC) - Vaults (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	5.47	14.5	0.04	0.17	—	0.17	0.16	—	0.16	—	4,009	4,009	0.16	0.03	4,023
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	5.47	14.5	0.04	0.17	—	0.17	0.16	—	0.16	—	4,009	4,009	0.16	0.03	4,023
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	2.92	7.75	0.02	0.09	—	0.09	0.09	—	0.09	—	2,137	2,137	0.09	0.02	2,144

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.53	1.41	< 0.005	0.02	—	0.02	0.02	—	0.02	—	354	354	0.01	< 0.005	355
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	0.03	1.26	0.62	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,039	1,039	0.06	0.15	1,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	122	122	< 0.005	0.01	124
Vendor	0.03	1.32	0.64	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,040	1,040	0.06	0.16	1,087
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	65.9	65.9	< 0.005	< 0.005	66.9
Vendor	0.02	0.69	0.34	< 0.005	0.01	0.15	0.16	0.01	0.04	0.05	—	554	554	0.03	0.08	580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	11.1
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	91.7	91.7	0.01	0.01	96.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.15. 320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	8.42	21.8	0.06	0.28	—	0.28	0.26	—	0.26	—	6,098	6,098	0.25	0.05	6,119
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.22	8.42	21.8	0.06	0.28	—	0.28	0.26	—	0.26	—	6,098	6,098	0.25	0.05	6,119
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	3.64	9.40	0.02	0.12	—	0.12	0.11	—	0.11	—	2,635	2,635	0.11	0.02	2,644

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.66	1.72	< 0.005	0.02	—	0.02	0.02	—	0.02	—	436	436	0.02	< 0.005	438
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.17. 320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	8.02	21.7	0.06	0.27	—	0.27	0.25	—	0.25	—	6,097	6,097	0.25	0.05	6,118
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.21	8.02	21.7	0.06	0.27	—	0.27	0.25	—	0.25	—	6,097	6,097	0.25	0.05	6,118
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	6.87	18.6	0.05	0.23	—	0.23	0.21	—	0.21	—	5,226	5,226	0.21	0.04	5,244

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.25	3.40	0.01	0.04	—	0.04	0.04	—	0.04	—	865	865	0.04	0.01	868
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.19. 320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	7.47	21.7	0.06	0.25	—	0.25	0.23	—	0.23	—	6,099	6,099	0.25	0.05	6,120
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.26	0.76	< 0.005	0.01	—	0.01	0.01	—	0.01	—	215	215	0.01	< 0.005	216
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.05	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	35.6	35.6	< 0.005	< 0.005	35.7
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.21. 500 kV Transmission Line Construction (HVAC) - Survey / Potholing (2026) - Unmitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	2.01	2.88	0.01	0.07	—	0.07	0.06	—	0.06	—	1,437	1,437	0.06	0.01	1,442
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.87	1.25	0.01	0.03	—	0.03	0.03	—	0.03	—	621	621	0.03	0.01	623
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.16	0.23	< 0.005	0.01	—	0.01	0.01	—	0.01	—	103	103	< 0.005	< 0.005	103

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.27	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.9	58.9	< 0.005	< 0.005	59.8
Vendor	< 0.005	0.20	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	159	159	0.01	0.02	167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	54.5	54.5	< 0.005	< 0.005	55.3
Vendor	< 0.005	0.21	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	159	159	0.01	0.02	166
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	23.8	23.8	< 0.005	< 0.005	24.2
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	68.7	68.7	< 0.005	0.01	71.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.94	3.94	< 0.005	< 0.005	4.00
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	11.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.23. 500 kV Transmission Line Construction (HVAC) - Survey / Potholing (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	1.78	2.89	0.01	0.06	—	0.06	0.06	—	0.06	—	1,438	1,438	0.06	0.01	1,443
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	1.08	1.75	0.01	0.04	—	0.04	0.03	—	0.03	—	871	871	0.04	0.01	874
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.20	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	144	144	0.01	< 0.005	145

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.25	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.8	57.8	< 0.005	< 0.005	58.7
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.01	0.02	163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	54.2
Vendor	< 0.005	0.20	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.01	0.02	163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.13	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	33.3
Vendor	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	94.4	94.4	0.01	0.01	98.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.43	5.43	< 0.005	< 0.005	5.51
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	16.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.25. 500 kV Transmission Line Construction (HVAC) - Vaults (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	5.63	15.3	0.04	0.18	—	0.18	0.17	—	0.17	—	4,078	4,078	0.17	0.03	4,092
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	5.63	15.3	0.04	0.18	—	0.18	0.17	—	0.17	—	4,078	4,078	0.17	0.03	4,092
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	1.61	4.39	0.01	0.05	—	0.05	0.05	—	0.05	—	1,168	1,168	0.05	0.01	1,172
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.29	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	193	193	0.01	< 0.005	194

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.3	67.3	< 0.005	< 0.005	68.3
Vendor	0.02	0.66	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	530	530	0.03	0.08	555
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	62.3	62.3	< 0.005	< 0.005	63.2
Vendor	0.02	0.70	0.33	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	531	531	0.03	0.08	554
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	18.3
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.99	2.99	< 0.005	< 0.005	3.03
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	26.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.27. 500 kV Transmission Line Construction (HVAC) - Vaults (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	5.34	15.3	0.04	0.17	—	0.17	0.16	—	0.16	—	4,077	4,077	0.17	0.03	4,091
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	5.34	15.3	0.04	0.17	—	0.17	0.16	—	0.16	—	4,077	4,077	0.17	0.03	4,091
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	4.00	11.4	0.03	0.13	—	0.13	0.12	—	0.12	—	3,054	3,054	0.12	0.02	3,065
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.73	2.09	0.01	0.02	—	0.02	0.02	—	0.02	—	506	506	0.02	< 0.005	507

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.29	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.0	66.0	< 0.005	< 0.005	67.1
Vendor	0.02	0.63	0.31	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	519	519	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	61.2	61.2	< 0.005	< 0.005	62.0
Vendor	0.02	0.66	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	520	520	0.03	0.08	544
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	46.3	46.3	< 0.005	< 0.005	47.0
Vendor	0.01	0.48	0.24	< 0.005	0.01	0.10	0.11	0.01	0.03	0.03	—	389	389	0.02	0.06	407
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.67	7.67	< 0.005	< 0.005	7.78
Vendor	< 0.005	0.09	0.04	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	64.4	64.4	< 0.005	0.01	67.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.29. 500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	6.31	21.7	0.05	0.21	—	0.21	0.19	—	0.19	—	5,518	5,518	0.22	0.04	5,537
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	6.31	21.7	0.05	0.21	—	0.21	0.19	—	0.19	—	5,518	5,518	0.22	0.04	5,537
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.12	3.87	0.01	0.04	—	0.04	0.03	—	0.03	—	983	983	0.04	0.01	986
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.21	0.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	163	163	0.01	< 0.005	163

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.78	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	182	182	< 0.005	0.01	184
Vendor	0.03	1.26	0.62	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,039	1,039	0.06	0.15	1,089
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.67	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	168	168	< 0.005	0.01	170
Vendor	0.03	1.32	0.64	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	1,040	1,040	0.06	0.16	1,087
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.3	30.3	< 0.005	< 0.005	30.7
Vendor	0.01	0.23	0.11	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	185	185	0.01	0.03	194
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.01	5.01	< 0.005	< 0.005	5.09
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	30.6	30.6	< 0.005	< 0.005	32.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.31. 500 kV Transmission Line Construction (HVAC) - Bridge Construction (2026) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	5.57	21.2	0.05	0.18	—	0.18	0.17	—	0.17	—	4,999	4,999	0.20	0.04	5,016
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	5.57	21.2	0.05	0.18	—	0.18	0.17	—	0.17	—	4,999	4,999	0.20	0.04	5,016
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	1.59	6.06	0.01	0.05	—	0.05	0.05	—	0.05	—	1,432	1,432	0.06	0.01	1,437
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.29	1.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	237	237	0.01	< 0.005	238

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	84.1	84.1	< 0.005	< 0.005	85.4
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	278
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.33	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.9	77.9	< 0.005	< 0.005	79.0
Vendor	0.01	0.35	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	265	265	0.01	0.04	277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.6	22.6	< 0.005	< 0.005	22.9
Vendor	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	76.0	76.0	< 0.005	0.01	79.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.74	3.74	< 0.005	< 0.005	3.79
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.6	12.6	< 0.005	< 0.005	13.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.33. 500 kV Transmission Line Construction (HVAC) - Bridge Construction (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	5.31	21.2	0.05	0.17	—	0.17	0.16	—	0.16	—	4,998	4,998	0.20	0.04	5,015
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	5.31	21.2	0.05	0.17	—	0.17	0.16	—	0.16	—	4,998	4,998	0.20	0.04	5,015
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	3.98	15.9	0.03	0.13	—	0.13	0.12	—	0.12	—	3,744	3,744	0.15	0.03	3,757
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.73	2.89	0.01	0.02	—	0.02	0.02	—	0.02	—	620	620	0.03	0.01	622

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.36	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	82.5	82.5	< 0.005	< 0.005	83.8
Vendor	0.01	0.31	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	76.5	76.5	< 0.005	< 0.005	77.5
Vendor	0.01	0.33	0.16	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	260	260	0.01	0.04	272
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	57.9	57.9	< 0.005	< 0.005	58.8
Vendor	0.01	0.24	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	195	195	0.01	0.03	204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.59	9.59	< 0.005	< 0.005	9.73
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	32.2	32.2	< 0.005	< 0.005	33.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.35. 320 kV Transmission Line Construction (HVAC) - Cable Install (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	3.06	7.37	0.02	0.06	—	0.06	0.06	—	0.06	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.77	1.85	< 0.005	0.02	—	0.02	0.01	—	0.01	—	426	426	0.02	< 0.005	428
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.14	0.34	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	70.5	70.5	< 0.005	< 0.005	70.8

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.57	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	132	132	< 0.005	0.01	134
Vendor	0.02	0.75	0.37	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	623	623	0.04	0.09	653
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.49	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	122	122	< 0.005	0.01	124
Vendor	0.02	0.79	0.38	< 0.005	0.01	0.17	0.18	0.01	0.05	0.06	—	624	624	0.04	0.09	652
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	31.1	31.1	< 0.005	< 0.005	31.5
Vendor	< 0.005	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	157	157	0.01	0.02	164
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.15	5.15	< 0.005	< 0.005	5.22
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.9	25.9	< 0.005	< 0.005	27.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.37. 320 kV Transmission Line Construction (HVAC) - Cable Install (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.97	7.36	0.02	0.06	—	0.06	0.05	—	0.05	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.97	7.36	0.02	0.06	—	0.06	0.05	—	0.05	—	1,696	1,696	0.07	0.01	1,702
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.74	1.83	< 0.005	0.01	—	0.01	0.01	—	0.01	—	422	422	0.02	< 0.005	424
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.14	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	69.9	69.9	< 0.005	< 0.005	70.1

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.54	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	131
Vendor	0.02	0.71	0.36	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	608	608	0.03	0.09	636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	120	120	< 0.005	0.01	122
Vendor	0.02	0.76	0.37	< 0.005	0.01	0.17	0.18	< 0.005	0.05	0.05	—	609	609	0.03	0.09	636
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.11	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	30.3	30.3	< 0.005	< 0.005	30.7
Vendor	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	151	151	0.01	0.02	158
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.01	5.01	< 0.005	< 0.005	5.08
Vendor	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.1	25.1	< 0.005	< 0.005	26.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.39. Commissioning and Testing (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.61	1.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	155	155	0.01	< 0.005	155
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.11	0.19	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.7	25.7	< 0.005	< 0.005	25.7
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.61	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	0.01	155
Vendor	< 0.005	0.20	0.10	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	156	156	0.01	0.02	163
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.2	22.2	< 0.005	< 0.005	22.5
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	22.3	22.3	< 0.005	< 0.005	23.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.67	3.67	< 0.005	< 0.005	3.72
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	3.87
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.41. Commissioning and Testing (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	4.24	7.28	0.01	0.02	—	0.02	0.02	—	0.02	—	1,082	1,082	0.04	0.01	1,085
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	2.88	4.94	0.01	0.02	—	0.02	0.02	—	0.02	—	734	734	0.03	0.01	737
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.53	0.90	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	122	122	< 0.005	< 0.005	122
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.67	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	162	162	< 0.005	< 0.005	163

Vendor	< 0.005	0.18	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.57	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	150	150	< 0.005	0.01	152
Vendor	< 0.005	0.19	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	152	152	0.01	0.02	159
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.38	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	105
Vendor	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	103	103	0.01	0.01	108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	17.3
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	17.9
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.43. Staging Areas (2027) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.34	8.72	0.02	0.08	—	0.08	0.08	—	0.08	—	2,017	2,017	0.08	0.02	2,024

Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.34	1.25	< 0.005	0.01	—	0.01	0.01	—	0.01	—	289	289	0.01	< 0.005	290
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.8	47.8	< 0.005	< 0.005	48.0
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.46	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	115	115	< 0.005	< 0.005	116
Vendor	0.02	0.99	0.48	0.01	0.01	0.21	0.22	0.01	0.06	0.07	—	780	780	0.04	0.12	815
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.01	0.01	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.6	16.6	< 0.005	< 0.005	16.9
Vendor	< 0.005	0.14	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	112	112	0.01	0.02	117
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.75	2.75	< 0.005	< 0.005	2.79
Vendor	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	< 0.005	< 0.005	19.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

3.45. Staging Areas (2028) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.19	8.71	0.02	0.08	—	0.08	0.07	—	0.07	—	2,018	2,018	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	2.19	8.71	0.02	0.08	—	0.08	0.07	—	0.07	—	2,018	2,018	0.08	0.02	2,024
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	1.49	5.91	0.01	0.05	—	0.05	0.05	—	0.05	—	1,369	1,369	0.06	0.01	1,374
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.27	1.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	227	227	0.01	< 0.005	227
Dust From Material Movement	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.50	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	122	122	< 0.005	< 0.005	122
Vendor	0.02	0.89	0.45	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	760	760	0.04	0.11	795
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.43	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	113	113	< 0.005	< 0.005	114
Vendor	0.02	0.95	0.46	0.01	0.01	0.21	0.22	0.01	0.06	0.06	—	761	761	0.04	0.11	795
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.29	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	77.3	77.3	< 0.005	< 0.005	78.5

Vendor	0.02	0.63	0.31	< 0.005	0.01	0.14	0.15	< 0.005	0.04	0.04	—	516	516	0.03	0.07	539
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	13.0
Vendor	< 0.005	0.11	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	85.4	85.4	< 0.005	0.01	89.3
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
500 kV Transmission Line Construction (HVAC) - Cable Install	Linear, Grubbing & Land Clearing	12/1/2027	2/15/2028	6.00	66.0	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Linear, Drainage, Utilities, & Sub-Grade	6/1/2026	5/15/2027	6.00	300	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Linear, Drainage, Utilities, & Sub-Grade	1/1/2027	4/15/2027	6.00	90.0	—

320 kV Transmission Line Construction (HVDC) - Vaults	Linear, Drainage, Utilities, & Sub-Grade	7/1/2026	8/15/2027	6.00	352	—
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Linear, Drainage, Utilities, & Sub-Grade	7/1/2026	1/15/2028	6.00	484	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Linear, Drainage, Utilities, & Sub-Grade	7/1/2026	9/15/2027	6.00	379	—
500 kV Transmission Line Construction (HVAC) - Vaults	Linear, Drainage, Utilities, & Sub-Grade	9/1/2026	11/15/2027	6.00	378	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Linear, Drainage, Utilities, & Sub-Grade	9/1/2027	11/15/2027	6.00	65.0	—
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Linear, Drainage, Utilities, & Sub-Grade	9/1/2026	11/15/2027	6.00	378	—
320 kV Transmission Line Construction (HVAC) - Cable Install	Linear, Drainage, Utilities, & Sub-Grade	9/16/2027	4/15/2028	6.00	183	—
Commissioning and Testing	Linear, Drainage, Utilities, & Sub-Grade	11/1/2027	10/15/2028	6.00	300	—
Staging Areas	Linear, Drainage, Utilities, & Sub-Grade	11/1/2027	10/15/2028	6.00	300	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	175	0.23

500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.15
500 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.08
500 kV Transmission Line Construction (HVAC) - Cable Install	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	45.0	0.70
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Off-Highway Tractors	Diesel	Average	1.00	8.00	525	0.29
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Excavators	Diesel	Tier 4 Final	1.00	8.00	68.0	0.30
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.30
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
320 kV Transmission Line Construction (HVDC) - Vaults	Excavators	Diesel	Average	1.00	8.00	275	0.34
320 kV Transmission Line Construction (HVDC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
320 kV Transmission Line Construction (HVDC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26

320 kV Transmission Line Construction (HVDC) - Vaults	Cranes	Diesel	Tier 4 Final	2.00	2.00	260	0.06
320 kV Transmission Line Construction (HVDC) - Vaults	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.23
320 kV Transmission Line Construction (HVDC) - Vaults	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.34
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Excavators	Diesel	Average	1.00	8.00	275	0.30
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.38
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Pavers	Diesel	Average	1.00	2.00	235	0.38
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.36
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30

500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Off-Highway Tractors	Diesel	Average	1.00	8.00	525	0.29
500 kV Transmission Line Construction (HVAC) - Vaults	Excavators	Diesel	Average	1.00	8.00	275	0.30
500 kV Transmission Line Construction (HVAC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
500 kV Transmission Line Construction (HVAC) - Vaults	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
500 kV Transmission Line Construction (HVAC) - Vaults	Cranes	Diesel	Tier 4 Final	2.00	8.00	260	0.06
500 kV Transmission Line Construction (HVAC) - Vaults	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.23
500 kV Transmission Line Construction (HVAC) - Vaults	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Excavators	Diesel	Average	1.00	8.00	275	0.30
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.26
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	275	0.26
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Pavers	Diesel	Average	1.00	2.00	235	0.38

500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Rollers	Diesel	Tier 4 Final	1.00	3.00	405	0.34
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	415	0.36
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Excavators	Diesel	Average	2.00	8.00	275	0.23
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	68.0	0.18
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Off-Highway Trucks	Diesel	Tier 4 Final	3.00	8.00	415	0.19
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Off-Highway Trucks	Diesel	Average	1.00	4.00	300	0.30
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Cranes	Diesel	Tier 4 Final	1.00	8.00	450	0.09
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Skid Steer Loaders	Diesel	Average	1.00	4.00	74.3	0.40

500 kV Transmission Line Construction (HVAC) - Bridge Construction	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	5.00	130	0.27
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Pavers	Diesel	Average	1.00	6.00	235	0.04
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Rollers	Diesel	Tier 4 Final	1.00	6.00	405	0.04
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Tier 4 Final	2.00	8.00	175	0.23
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.15
320 kV Transmission Line Construction (HVAC) - Cable Install	Generator Sets	Diesel	Tier 4 Final	1.00	8.00	45.0	0.70
320 kV Transmission Line Construction (HVAC) - Cable Install	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.08
Commissioning and Testing	Generator Sets	Diesel	Tier 4 Final	2.00	10.0	45.0	0.52
Commissioning and Testing	Aerial Lifts	Diesel	Average	3.00	8.00	49.0	0.15
Commissioning and Testing	Rough Terrain Forklifts	Diesel	Tier 4 Final	1.00	5.00	130	0.30
Commissioning and Testing	Forklifts	Diesel	Tier 4 Final	1.00	5.00	49.0	0.10
Staging Areas	Off-Highway Trucks	Diesel	Average	1.00	8.00	300	0.36
Staging Areas	Cranes	Diesel	Tier 4 Final	1.00	8.00	260	0.12
Staging Areas	Rough Terrain Forklifts	Diesel	Tier 4 Final	2.00	8.00	130	0.30

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
500 kV Transmission Line Construction (HVAC) - Cable Install	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Cable Install	Worker	8.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Cable Install	Vendor	12.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Cable Install	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Cable Install	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Worker	14.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Vendor	8.00	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Worker	7.00	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Vendor	20.0	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Hauling	0.00	20.0	HHDT

320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Vaults	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Vaults	Worker	16.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Vaults	Vendor	40.0	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Vaults	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Vaults	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	—	—	—	—
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Worker	0.00	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Vendor	0.00	8.40	HHDT,MHDT
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Worker	7.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Vendor	6.00	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Vaults	—	—	—	—

500 kV Transmission Line Construction (HVAC) - Vaults	Worker	8.00	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Vaults	Vendor	20.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Vaults	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Vaults	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Worker	22.0	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Vendor	40.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	Onsite truck	—	—	HHDT
500 kV Transmission Line Construction (HVAC) - Bridge Construction	—	—	—	—
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Worker	10.0	11.7	LDA,LDT1,LDT2
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Vendor	10.0	8.40	HHDT,MHDT
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Hauling	0.00	20.0	HHDT
500 kV Transmission Line Construction (HVAC) - Bridge Construction	Onsite truck	—	—	HHDT
320 kV Transmission Line Construction (HVAC) - Cable Install	—	—	—	—
320 kV Transmission Line Construction (HVAC) - Cable Install	Worker	16.0	11.7	LDA,LDT1,LDT2
320 kV Transmission Line Construction (HVAC) - Cable Install	Vendor	24.0	8.40	HHDT,MHDT

320 kV Transmission Line Construction (HVAC) - Cable Install	Hauling	0.00	20.0	HHDT
320 kV Transmission Line Construction (HVAC) - Cable Install	Onsite truck	—	—	HHDT
Commissioning and Testing	—	—	—	—
Commissioning and Testing	Worker	20.0	11.7	LDA,LDT1,LDT2
Commissioning and Testing	Vendor	6.00	8.40	HHDT,MHDT
Commissioning and Testing	Hauling	0.00	20.0	HHDT
Commissioning and Testing	Onsite truck	—	—	HHDT
Staging Areas	—	—	—	—
Staging Areas	Worker	15.0	11.7	LDA,LDT1,LDT2
Staging Areas	Vendor	30.0	8.40	HHDT,MHDT
Staging Areas	Hauling	0.00	20.0	HHDT
Staging Areas	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

500 kV Transmission Line Construction (HVAC) - Cable Install	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Survey / Potholing	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Trenchless Crossings	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Vaults	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVDC) - Duct Bank and Restoration	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Survey / Potholing	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Vaults	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Duct Bank and Restoration	—	—	17.0	0.00	—
500 kV Transmission Line Construction (HVAC) - Bridge Construction	—	—	17.0	0.00	—
320 kV Transmission Line Construction (HVAC) - Cable Install	—	—	17.0	0.00	—
Commissioning and Testing	—	—	17.0	0.00	—
Staging Areas	—	—	17.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
User Defined Linear	17.0	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	15.3	annual days of extreme heat
Extreme Precipitation	6.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	16.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A

Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	2	1	1	3
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—

AQ-Ozone	32.1
AQ-PM	7.54
AQ-DPM	16.2
Drinking Water	54.0
Lead Risk Housing	33.7
Pesticides	88.9
Toxic Releases	18.8
Traffic	70.7
Effect Indicators	—
CleanUp Sites	7.71
Groundwater	40.8
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	58.7
Solid Waste	83.3
Sensitive Population	—
Asthma	24.9
Cardio-vascular	39.8
Low Birth Weights	18.2
Socioeconomic Factor Indicators	—
Education	66.8
Housing	24.9
Linguistic	64.4
Poverty	37.0
Unemployment	—

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.89965354
Employed	19.97946875
Median HI	74.83639163
Education	—
Bachelor's or higher	39.1505197
High school enrollment	100
Preschool enrollment	4.709354549
Transportation	—
Auto Access	72.44963429
Active commuting	50.44270499
Social	—
2-parent households	70.69164635
Voting	86.1157449
Neighborhood	—
Alcohol availability	90.97908379
Park access	16.92544591
Retail density	17.41306301
Supermarket access	9.662517644
Tree canopy	53.06043886
Housing	—
Homeownership	66.77787758
Housing habitability	66.08494803
Low-inc homeowner severe housing cost burden	94.37957141
Low-inc renter severe housing cost burden	15.38560246
Uncrowded housing	48.81303734

Health Outcomes	—
Insured adults	46.18247145
Arthritis	50.5
Asthma ER Admissions	71.2
High Blood Pressure	53.6
Cancer (excluding skin)	49.7
Asthma	61.7
Coronary Heart Disease	37.1
Chronic Obstructive Pulmonary Disease	50.7
Diagnosed Diabetes	39.3
Life Expectancy at Birth	20.7
Cognitively Disabled	64.4
Physically Disabled	50.9
Heart Attack ER Admissions	58.4
Mental Health Not Good	52.8
Chronic Kidney Disease	45.1
Obesity	42.9
Pedestrian Injuries	82.5
Physical Health Not Good	47.6
Stroke	51.7
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	57.8
No Leisure Time for Physical Activity	49.6
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	69.7
Elderly	24.3
English Speaking	56.3
Foreign-born	50.8
Outdoor Workers	7.6
Climate Change Adaptive Capacity	—
Impervious Surface Cover	92.9
Traffic Density	64.2
Traffic Access	55.9
Other Indices	—
Hardship	35.6
Other Decision Support	—
2016 Voting	73.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	35.0
Healthy Places Index Score for Project Location (b)	54.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Approx. 10KSF control enclosure/building
Construction: Construction Phases	Construction Schedule from 10172023 List
Construction: Off-Road Equipment	San Jose B Construction from Construction Activity Input 101723
Construction: Trips and VMT	Updated per Traffic Identified in construction spreadsheet 66 120

AERMOD PRIME - (DATED 21112)

AERMODPrMSPx VERSION


```
 ***************************************************************************************************
 *  CAUTION: There is a known bug in U.S. EPA AERMOD version 21112 that occurs when RLINE Roadway and   *
 *  RLINEXT Roadway sources are included in a model run and the order of the receptors is changed. Due  *
 *  to this bug, running the BREEZE-Enhanced version of AERMOD 21112 can result in differences in       *
 *  results when compared with U.S. EPA AERMOD 21112 if RLINE and/or RLINEXT Roadway sources are        *
 *  included. A new BREEZE-Enhanced version will be released as soon as U.S. EPA fixes the bug.         *
 *  Note: if RLINE and/or RLINEXT Roadway sources are not included in the model run, then the           *
 *  BREEZE-Enhanced version of AERMOD 21112 can be used without this caution.                           *
 ***************************************************************************************************

 Run Began on 11/28/2023 at 13:52:26

** BREEZE AERMOD
** Trinity Consultants
** VERSION  11.0

CO STARTING
CO TITLEONE  Metcalf Terminal DPM
CO MODELOPT  DFAULT  CONC  NODRYDPLT  NOWETDPLT
CO RUNORNOT  RUN
CO AVERTIME  ANNUAL
CO POLLUTID  PM10
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
SO LOCATION  U0ARC001  AREAPOLY  597389.9  4133232.6  0
** SRCDESCR  Construction Area
SO SRCPARAM  U0ARC001  2.07E-08  3  11  1
SO AREAVERT  U0ARC001  597389.9 4133232.6  597445 4133135.6  597410.8 4133103.7  597420.2 4133084.9
SO AREAVERT  U0ARC001  597412.5 4133078.9  597400.4 4133096.5  597306.1 4133046.9  597257.1 4133140
SO AREAVERT  U0ARC001  597273.1 4133206.7  597351.9 4133235.4  597389.9 4133232.6
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  597441.7  4133350  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  597490.8  4133235.9  0  0
** SENSITIV
** RCPDESCR  R2
RE DISCCART  597537.6  4133143.9  0  0
** SENSITIV
** RCPDESCR  R3
RE FINISHED

ME STARTING
ME SURFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC"
** SURFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC"
ME PROFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL"
** PROFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL"
ME SURFDATA  23293 2017
ME UAIRDATA  23230 2017
ME PROFBASE  0  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  ANNUAL  ALL  ALL`ANNUAL.plt  10000
OU FINISHED

** **************************************************************************
** It is recommended that the user not edit any data below this line
** **************************************************************************


** AMPTYPE
** AMPDATUM  -1
** AMPZONE  -1
** AMPHEMISPHERE

** PROJECTIONWKT
```

PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,
0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",1
1],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION UTM
** DATUM WGE
** UNITS METER
** ZONE 11
** HEMISPHERE N
** ORIGINLON 0
** ORIGINLAT 0
** PARALLEL1 0
** PARALLEL2 0
** AZIMUTH 0
** SCALEFACT 0
** FALSEEAST 0
** FALSENORTH 0

** POSTFMT UNFORM
** TEMPLATE USERDEFINED
** AERMODEXE AERMOD_BREEZE_21112_64.EXE
** AERMAPEXE AERMAP_EPA_18081_64.EXE

  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   2 Warning Message(s)
 A Total of   0 Informational Message(s)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
 ME W186   52   MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used   0.50
 ME W187   52   MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ****
 *** SETUP Finishes Successfully ***
 ****

 *** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

                                          ***   MODEL SETUP OPTIONS SUMMARY   ***
 -

 **Model Is Setup For Calculation of Average CONCentration Values.

   -- DEPOSITION LOGIC --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION. DRYDPLT = F
 **Model Uses NO WET DEPLETION. WETDPLT = F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

 **Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: PM10

```
**Model Calculates ANNUAL Averages Only

**This Run Includes:      1 Source(s);       1 Source Group(s); and       3 Receptor(s)

               with:      0 POINT(s), including
                          0 POINTCAP(s) and      0 POINTHOR(s)
                and:      0 VOLUME source(s)
                and:      1 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with a total of     0 line(s)


**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date:  18081

**Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                               ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:          aermod.inp
**Output Print File:             aermod.out

 *** AERMOD - VERSION 21112  ***   ***  Metcalf Terminal DPM                                                ***        11/28/23
*** AERMET - VERSION  18081 ***   ***                                                                     ***        13:52:26
                                                                                                                     PAGE   2
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*


                                              *** AREAPOLY SOURCE DATA ***

              NUMBER EMISSION RATE   LOCATION OF AREA  BASE     RELEASE  NUMBER      INIT.   URBAN  EMISSION RATE
  SOURCE       PART.  (GRAMS/SEC       X        Y      ELEV.    HEIGHT  OF VERTS.     SZ     SOURCE  SCALAR VARY
    ID         CATS.   /METER**2)   (METERS) (METERS) (METERS) (METERS)           (METERS)              BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

U0ARC001         0   0.20700E-07  597389.9 4133232.6     0.0     3.00      11        1.00     NO
 *** AERMOD - VERSION 21112  ***   ***  Metcalf Terminal DPM                                                ***        11/28/23
*** AERMET - VERSION  18081 ***   ***                                                                     ***        13:52:26
                                                                                                                     PAGE   3
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*


                                         *** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID                                             SOURCE IDs
-----------                                             ----------


 ALL        U0ARC001    ,
 *** AERMOD - VERSION 21112  ***   ***  Metcalf Terminal DPM                                                ***        11/28/23
*** AERMET - VERSION  18081 ***   ***                                                                     ***        13:52:26
                                                                                                                     PAGE   4
*** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                               (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC Met Version: 18081
Profile file: C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 23293 Upper air station no.: 23230
Name: UNKNOWN Name: UNKNOWN
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-22.4	0.219	-9.000	-9.000	-999.	246.	52.9	0.02	0.68	1.00	3.36	121.	7.9	277.5	2.0
17	01	01	1	02	-12.5	0.138	-9.000	-9.000	-999.	125.	21.0	0.02	0.68	1.00	2.17	180.	7.9	278.1	2.0
17	01	01	1	03	-16.7	0.164	-9.000	-9.000	-999.	160.	29.6	0.02	0.68	1.00	2.55	137.	7.9	278.8	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	172.	32.7	0.02	0.68	1.00	2.67	125.	7.9	279.2	2.0
17	01	01	1	05	-21.8	0.215	-9.000	-9.000	-999.	239.	50.6	0.02	0.68	1.00	3.29	122.	7.9	279.2	2.0
17	01	01	1	06	-15.2	0.153	-9.000	-9.000	-999.	145.	25.8	0.02	0.68	1.00	2.39	154.	7.9	279.9	2.0
17	01	01	1	07	-18.9	0.187	-9.000	-9.000	-999.	194.	38.3	0.02	0.68	1.00	2.88	124.	7.9	279.9	2.0
17	01	01	1	08	-17.7	0.175	-9.000	-9.000	-999.	176.	33.7	0.02	0.68	0.74	2.71	132.	7.9	279.9	2.0
17	01	01	1	09	5.8	0.168	0.369	0.005	314.	166.	-74.7	0.02	0.68	0.39	2.32	134.	7.9	280.9	2.0
17	01	01	1	10	35.9	0.138	0.923	0.018	792.	123.	-6.6	0.02	0.68	0.27	1.59	138.	7.9	282.0	2.0
17	01	01	1	11	59.1	0.123	1.168	0.019	974.	104.	-2.9	0.02	0.68	0.23	1.28	129.	7.9	284.2	2.0
17	01	01	1	12	72.0	0.252	1.293	0.020	1085.	304.	-20.1	0.02	0.68	0.21	3.34	280.	7.9	284.9	2.0
17	01	01	1	13	87.9	0.389	1.384	0.019	1089.	582.	-60.3	0.05	0.68	0.21	4.65	263.	7.9	285.9	2.0
17	01	01	1	14	65.5	0.353	1.256	0.019	1091.	504.	-60.5	0.05	0.68	0.22	4.22	270.	7.9	285.9	2.0
17	01	01	1	15	46.1	0.403	1.118	0.018	1093.	613.	-128.0	0.05	0.68	0.25	4.97	244.	7.9	285.4	2.0
17	01	01	1	16	18.2	0.370	0.820	0.018	1094.	542.	-252.7	0.02	0.68	0.33	5.44	281.	7.9	285.4	2.0
17	01	01	1	17	-32.0	0.420	-9.000	-9.000	-999.	653.	209.2	0.02	0.68	0.57	6.43	279.	7.9	283.1	2.0
17	01	01	1	18	-28.9	0.288	-9.000	-9.000	-999.	382.	91.1	0.05	0.68	1.00	3.85	243.	7.9	282.0	2.0
17	01	01	1	19	-18.6	0.185	-9.000	-9.000	-999.	197.	37.6	0.05	0.68	1.00	2.52	246.	7.9	282.0	2.0
17	01	01	1	20	-13.3	0.147	-9.000	-9.000	-999.	135.	23.7	0.05	0.68	1.00	2.03	225.	7.9	280.9	2.0
17	01	01	1	21	-7.4	0.105	-9.000	-9.000	-999.	82.	14.3	0.02	0.68	1.00	1.69	116.	7.9	282.0	2.0
17	01	01	1	22	-10.4	0.130	-9.000	-9.000	-999.	112.	19.0	0.05	0.68	1.00	1.76	94.	7.9	281.4	2.0
17	01	01	1	23	-14.5	0.149	-9.000	-9.000	-999.	138.	24.5	0.02	0.68	1.00	2.33	133.	7.9	280.9	2.0
17	01	01	1	24	-21.8	0.215	-9.000	-9.000	-999.	240.	51.0	0.02	0.68	1.00	3.30	114.	7.9	280.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
17	01	01	01	7.9	1	121.	3.36	277.6	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): U0ARC001 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
597441.70	4133350.00	0.00847	597490.80	4133235.90	0.01309
597537.60	4133143.90	0.01887			

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.01887 AT (597537.60, 4133143.90, 0.00, 0.00, 0.00)	SR	
	2ND HIGHEST VALUE IS	0.01309 AT (597490.80, 4133235.90, 0.00, 0.00, 0.00)	SR	
	3RD HIGHEST VALUE IS	0.00847 AT (597441.70, 4133350.00, 0.00, 0.00, 0.00)	SR	
	4TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	5TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	6TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	7TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT (0.00, 0.00, 0.00, 0.00, 0.00)		

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 3 Warning Message(s)
A Total of 194 Informational Message(s)

A Total of 8784 Hours Were Processed

A Total of 52 Calm Hours Identified

A Total of 142 Missing Hours Identified (1.62 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
ME W186 52 MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used 0.50
ME W187 52 MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
MX W481 8785 MAIN: Data Remaining After End of Year. Number of Hours= 24

****
*** AERMOD Finishes Successfully ***
****

```
                    AERMOD PRIME - (DATED 21112 )

                   AERMODPrMSPx VERSION
             (C) COPYRIGHT 1998-2021, Trinity Consultants

 ***************************************************************************************************
 *  CAUTION: There is a known bug in U.S. EPA AERMOD version 21112 that occurs when RLINE Roadway and   *
 *  RLINEXT Roadway sources are included in a model run and the order of the receptors is changed. Due  *
 *  to this bug, running the BREEZE-Enhanced version of AERMOD 21112 can result in differences in       *
 *  results when compared with U.S. EPA AERMOD 21112 if RLINE and/or RLINEXT Roadway sources are        *
 *  included. A new BREEZE-Enhanced version will be released as soon as U.S. EPA fixes the bug.         *
 *  Note: if RLINE and/or RLINEXT Roadway sources are not included in the model run, then the           *
 *  BREEZE-Enhanced version of AERMOD 21112 can be used without this caution.                           *
 ***************************************************************************************************

 Run Began on 11/28/2023 at 13:12:59

** BREEZE AERMOD
** Trinity Consultants
** VERSION  11.0

CO STARTING
CO TITLEONE  Metcalf Terminal DPM
CO MODELOPT  DFAULT  CONC  NODRYDPLT  NOWETDPLT
CO RUNORNOT  RUN
CO AVERTIME  ANNUAL
CO POLLUTID  PM10
CO FINISHED

SO STARTING
SO ELEVUNIT  METERS
SO LOCATION  4PL9V006  AREAPOLY  612436.2  4119389.7  0
SO SRCPARAM  4PL9V006  1.31E-08  3  5  1
SO AREAVERT  4PL9V006  612436.2 4119389.7  612241 4119209.5  612124.2 4119346.6  612323 4119529.3
SO AREAVERT  4PL9V006  612436.2 4119389.7
SO SRCGROUP  ALL
SO FINISHED

RE STARTING
RE ELEVUNIT  METERS
RE DISCCART  612529.3  4119274.2  0  0
** SENSITIV
** RCPDESCR  R1
RE DISCCART  612191.3  4118970  0  0
** SENSITIV
** RCPDESCR  R2
RE FINISHED

ME STARTING
ME SURFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC"
** SURFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC"
ME PROFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL"
** PROFFILE  "C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL"
ME SURFDATA  23293 2017
ME UAIRDATA  23230 2017
ME PROFBASE  0  METERS
ME FINISHED

OU STARTING
OU FILEFORM  FIX
OU PLOTFILE  ANNUAL  ALL  ALL`ANNUAL.plt  10000
OU FINISHED

** ************************************************************************
** It is recommended that the user not edit any data below this line
** ************************************************************************


** AMPTYPE
** AMPDATUM  -1
** AMPZONE  -1
** AMPHEMISPHERE

** PROJECTIONWKT
PROJCS["UTM_6326_Zone11",GEOGCS["WGS_84",DATUM["World_Geodetic_System_1984",SPHEROID["WGS_1984",6378137,298.257223563],TOWGS84[0,0,
0,0,0,0,0]],PRIMEM["Greenwich",0],UNIT["Degree",0.0174532925199433]],PROJECTION["Universal_Transverse_Mercator"],PARAMETER["Zone",1
1],UNIT["Meter",1,AUTHORITY["EPSG","9001"]]]
** PROJECTION  UTM
** DATUM  WGE
```

```
** UNITS  METER
** ZONE  11
** HEMISPHERE  N
** ORIGINLON  0
** ORIGINLAT  0
** PARALLEL1  0
** PARALLEL2  0
** AZIMUTH  0
** SCALEFACT  0
** FALSEEAST  0
** FALSENORTH  0

** POSTFMT  UNFORM
** TEMPLATE USERDEFINED
** AERMODEXE  AERMOD_BREEZE_21112_64.EXE
** AERMAPEXE  AERMAP_EPA_18081_64.EXE



  *** Message Summary For AERMOD Model Setup ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of            0 Informational Message(s)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      47       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187      47       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

 *** AERMOD - VERSION 21112  ***   ***  Metcalf Terminal DPM                                                  ***        11/28/23
 *** AERMET - VERSION  18081 ***   ***                                                                       ***       13:12:59
                                                                                                                      PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

 **Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM10

 **Model Calculates ANNUAL Averages Only

 **This Run Includes:      1 Source(s);       1 Source Group(s); and       2 Receptor(s)

               with:      0 POINT(s), including
```

```
                    0 POINTCAP(s) and      0 POINTHOR(s)
          and:      0 VOLUME source(s)
          and:      1 AREA type source(s)
          and:      0 LINE source(s)
          and:      0 RLINE/RLINEXT source(s)
          and:      0 OPENPIT source(s)
          and:      0 BUOYANT LINE source(s) with a total of     0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.

 **The AERMET Input Meteorological Data Version Date:  18081

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

 **NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =     0.00 ;  Decay Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                              ;  Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:          aermod.inp
 **Output Print File:             aermod.out
```


*** AREAPOLY SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	LOCATION OF AREA X (METERS)	LOCATION OF AREA Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	NUMBER OF VERTS.	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
4PL9V006	0	0.13100E-07	612436.2	4119389.7	0.0	3.00	5	1.00	NO	

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
ALL	4PL9V006 ,


```
                                                  *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                       (1=YES; 0=NO)

           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
           1 1 1 1 1 1 1 1 1 1  1 1 1 1 1

               NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.


                                          *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
```

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.SFC Met Version: 18081
Profile file: C:\USERS\RYAN\MYDRIV~1\CIA265~1\23-31M~1\MODELS\AERMOD\SANJOS~2\KSJC_2017.PFL
Surface format: FREE
Profile format: FREE
Surface station no.: 23293 Upper air station no.: 23230
Name: UNKNOWN Name: UNKNOWN
Year: 2017 Year: 2017

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
17	01	01	1	01	-22.4	0.219	-9.000	-9.000	-999.	246.	52.9	0.02	0.68	1.00	3.36	121.	7.9	277.5	2.0
17	01	01	1	02	-12.5	0.138	-9.000	-9.000	-999.	125.	21.0	0.02	0.68	1.00	2.17	180.	7.9	278.1	2.0
17	01	01	1	03	-16.7	0.164	-9.000	-9.000	-999.	160.	29.6	0.02	0.68	1.00	2.55	137.	7.9	278.8	2.0
17	01	01	1	04	-17.5	0.172	-9.000	-9.000	-999.	172.	32.7	0.02	0.68	1.00	2.67	125.	7.9	279.2	2.0
17	01	01	1	05	-21.8	0.215	-9.000	-9.000	-999.	239.	50.6	0.02	0.68	1.00	3.29	122.	7.9	279.2	2.0
17	01	01	1	06	-15.2	0.153	-9.000	-9.000	-999.	145.	25.8	0.02	0.68	1.00	2.39	154.	7.9	279.9	2.0
17	01	01	1	07	-18.9	0.187	-9.000	-9.000	-999.	194.	38.3	0.02	0.68	1.00	2.88	124.	7.9	279.9	2.0
17	01	01	1	08	-17.7	0.175	-9.000	-9.000	-999.	176.	33.7	0.02	0.68	0.74	2.71	132.	7.9	279.9	2.0
17	01	01	1	09	5.8	0.168	0.369	0.005	314.	166.	-74.7	0.02	0.68	0.39	2.32	134.	7.9	280.9	2.0
17	01	01	1	10	35.9	0.138	0.923	0.018	792.	123.	-6.6	0.02	0.68	0.27	1.59	138.	7.9	282.0	2.0
17	01	01	1	11	59.1	0.123	1.168	0.019	974.	104.	-2.9	0.02	0.68	0.23	1.28	129.	7.9	284.2	2.0
17	01	01	1	12	72.0	0.252	1.293	0.020	1085.	304.	-20.1	0.02	0.68	0.21	3.34	280.	7.9	284.9	2.0
17	01	01	1	13	87.9	0.389	1.384	0.019	1089.	582.	-60.3	0.05	0.68	0.21	4.65	263.	7.9	285.9	2.0
17	01	01	1	14	65.5	0.353	1.256	0.019	1091.	504.	-60.5	0.05	0.68	0.22	4.22	270.	7.9	285.9	2.0
17	01	01	1	15	46.1	0.403	1.118	0.018	1093.	613.	-128.0	0.05	0.68	0.25	4.97	244.	7.9	285.4	2.0
17	01	01	1	16	18.2	0.370	0.820	0.018	1094.	542.	-252.7	0.02	0.68	0.33	5.44	281.	7.9	285.4	2.0
17	01	01	1	17	-32.0	0.420	-9.000	-9.000	-999.	653.	209.2	0.02	0.68	0.57	6.43	279.	7.9	283.1	2.0
17	01	01	1	18	-28.9	0.288	-9.000	-9.000	-999.	382.	91.1	0.05	0.68	1.00	3.85	243.	7.9	282.0	2.0
17	01	01	1	19	-18.6	0.185	-9.000	-9.000	-999.	197.	37.6	0.05	0.68	1.00	2.52	246.	7.9	282.0	2.0
17	01	01	1	20	-13.3	0.147	-9.000	-9.000	-999.	135.	23.7	0.05	0.68	1.00	2.03	225.	7.9	280.9	2.0
17	01	01	1	21	-7.4	0.105	-9.000	-9.000	-999.	82.	14.3	0.02	0.68	1.00	1.69	116.	7.9	282.0	2.0
17	01	01	1	22	-10.4	0.130	-9.000	-9.000	-999.	112.	19.0	0.05	0.68	1.00	1.76	94.	7.9	281.4	2.0
17	01	01	1	23	-14.5	0.149	-9.000	-9.000	-999.	138.	24.5	0.02	0.68	1.00	2.33	133.	7.9	280.9	2.0
17	01	01	1	24	-21.8	0.215	-9.000	-9.000	-999.	240.	51.0	0.02	0.68	1.00	3.30	114.	7.9	280.4	2.0

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
17	01	01	01	7.9	1	121.	3.36	277.6	99.0	-99.00	-99.00

F indicates top of profile (=1) or below (=0)

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE ANNUAL AVERAGE CONCENTRATION VALUES AVERAGED OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): 4PL9V006 ,

*** SENSITIVE DISCRETE RECEPTOR POINTS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
612529.30	4119274.20	0.02155	612191.30	4118970.00	0.00110

*** MODELOPTs: RegDFAULT CONC ELEV NODRYDPLT NOWETDPLT RURAL ADJ_U*

*** THE SUMMARY OF MAXIMUM ANNUAL RESULTS AVERAGED OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

NETWORK

```
GROUP ID                      AVERAGE CONC               RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)  OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL       1ST HIGHEST VALUE IS       0.02155 AT (  612529.30,  4119274.20,     0.00,     0.00,    0.00)  SR
          2ND HIGHEST VALUE IS       0.00110 AT (  612191.30,  4118970.00,     0.00,     0.00,    0.00)  SR
          3RD HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          4TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          5TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          6TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          7TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          8TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          9TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
         10TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  NODRYDPLT  NOWETDPLT  RURAL  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            3 Warning Message(s)
 A Total of          194 Informational Message(s)

 A Total of         8784 Hours Were Processed

 A Total of           52 Calm Hours Identified

 A Total of          142 Missing Hours Identified (  1.62 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
 ME W186      47       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used          0.50
 ME W187      47       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
 MX W481    8785         MAIN: Data Remaining After End of Year. Number of Hours=          24

    ************************************
    *** AERMOD Finishes Successfully ***
    ************************************
```

Air Quality Health Risk Calculations (Worst-Case)
Skyline Terminal (Receptor 2)

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0656**
	Construction Start	**7/1/2026**
	Construction Complete	**2/15/2028**
	Days	**594**
	Construction Emission per day (lb/day)	**0.220875421**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.001158062**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**2.07E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.01309**

	Days	Days to years					
Duration	594	1.62739726					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.01309	0.01309	0.01309	0.01309	0.01309	0.01309	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00000454	0.00001370	0.00001082	0.00000936	0.00000421	0.00000364	
Construction Days	594	1.62739726					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.62739726	1.62739726	1.62739726	1.62739726	1.62739726	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	1.51486E-07	2.97745E-06	5.97663E-07	5.17141E-07	7.85899E-08	6.80331E-08	
Risk per million Exposed	0.151485708	2.977450355	0.597662501	0.517141188	0.078589907	0.068033053	
Cancer Risk Per Million 9-years	3.73						
Cancer Risk Per Million 30-years	3.72						
Cancer Risk Per Million 70-years	**3.71**						

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal R1

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0435**
	Construction Start	**6/1/2026**
	Construction Complete	**2/15/2028**
	Days	**624**
	Construction Emission per day (lb/day)	**0.139423077**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000731003**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.31E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.0206**

	Days	Days to years					
Duration	624	1.709589041					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.0206	0.0206	0.0206	0.0206	0.0206	0.0206	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00000714	0.00002156	0.00001703	0.00001473	0.00000662	0.00000574	
Construction Days	624	1.709589041					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.709589041	1.709589041	1.709589041	1.709589041	1.709589041	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	2.38396E-07	4.92232E-06	9.88056E-07	8.54938E-07	1.29925E-07	1.12472E-07	
Risk per million Exposed	0.238396149	4.922324575	0.988056379	0.854938446	0.12992493	0.112472327	
Cancer Risk Per Million Construction Duration	5.16						
Cancer Risk Per Million 30-years	6.15						
Cancer Risk Per Million 70-years	**6.13**						

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal R2

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0435**
	Construction Start	**6/1/2026**
	Construction Complete	**2/15/2028**
	Days	**624**
	Construction Emission per day (lb/day)	**0.139423077**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000731003**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.31E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.032**

	Days	Days to years					
Duration	624	1.709589041					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.032	0.032	0.032	0.032	0.032	0.032	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00001109	0.00003348	0.00002645	0.00002289	0.00001029	0.00000891	
Construction Days	624	1.709589041					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.709589041	1.709589041	1.709589041	1.709589041	1.709589041	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	3.70324E-07	7.64633E-06	1.53484E-06	1.32806E-06	2.01825E-07	1.74714E-07	
Risk per million Exposed	0.370324114	7.646329437	1.534844861	1.328059723	0.201825134	0.174714295	
Cancer Risk Per Million Construction Duration	8.02						
Cancer Risk Per Million 30-years	9.55						
Cancer Risk Per Million 70-years	**9.52**						

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal R3

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0435**
	Construction Start	**6/1/2026**
	Construction Complete	**2/15/2028**
	Days	**624**
	Construction Emission per day (lb/day)	**0.139423077**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000731003**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.31E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.0212**

	Days	Days to years				
Duration	624	1.709589041				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.0212	0.0212	0.0212	0.0212	0.0212	0.0212
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000735	0.00002218	0.00001752	0.00001516	0.00000682	0.00000590
Construction Days	624	1.709589041				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	1.709589041	1.709589041	1.709589041	1.709589041	1.709589041
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	2.4534E-07	5.06569E-06	1.01683E-06	8.7984E-07	1.33709E-07	1.15748E-07
Risk per million Exposed	0.245339726	5.065693252	1.01683472	0.879839566	0.133709151	0.11574822

Cancer Risk Per Million Construction Duration	5.31
Cancer Risk Per Million 30-years	6.32
Cancer Risk Per Million 70-years	**6.31**

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal R4

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0435**
	Construction Start	**6/1/2026**
	Construction Complete	**2/15/2028**
	Days	**624**
	Construction Emission per day (lb/day)	**0.139423077**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000731003**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.31E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.0094**

	Days	Days to years					
Duration	624	1.709589041					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00000326	0.00000984	0.00000777	0.00000672	0.00000302	0.00000262	
Construction Days	624	1.709589041					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.709589041	1.709589041	1.709589041	1.709589041	1.709589041	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	1.08783E-07	2.24611E-06	4.50861E-07	3.90118E-07	5.92861E-08	5.13223E-08	
Risk per million Exposed	0.108782709	2.246109272	0.450860678	0.390117544	0.059286133	0.051322324	
Cancer Risk Per Million Construction Duration	2.35						
Cancer Risk Per Million 30-years	2.80						
Cancer Risk Per Million 70-years	**2.80**						

Air Quality Health Risk Calculations (Worst-Case)
Metcalf Terminal R5

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	**0.0435**
	Construction Start	**6/1/2026**
	Construction Complete	**2/15/2028**
	Days	**624**
	Construction Emission per day (lb/day)	**0.139423077**
	Annual Duration (Days)	**365**
	Annualized Emission Rate (Grams/Second)	**0.000731003**
	Project Site Size (Acres)	**13.8**
	Project Site Size (meters^2)	**55846.61863**
	Length of Smalles Side (meters)	**236.3188918**
Used as an input to AERMOD	Emission Rate over Grading Area(g/s-m^2)	**1.31E-08**
From AERMOD	Concentration Annual (Ug/M^3)	**0.0004**

	Days	Days to years					
Duration	624	1.709589041					
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70	
Cair (annual) - From F15	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290	
A (Default is 1)	1	1	1	1	1	1	
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96	
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001	
Dose-inh	0.00000014	0.00000042	0.00000033	0.00000029	0.00000013	0.00000011	
Construction Days	624	1.709589041					
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1	
Age Sensitivity Factor	10	10	3	3	1	1	
ED	0.25	1.709589041	1.709589041	1.709589041	1.709589041	1.709589041	
AT	70	70	70	70	70	70	
FAH	0.85	0.85	0.72	0.72	0.73	0.73	
Risk for Each Age Group	4.62905E-09	9.55791E-08	1.91856E-08	1.66007E-08	2.52281E-09	2.18393E-09	
Risk per million Exposed	0.004629051	0.095579118	0.019185561	0.016600747	0.002522814	0.002183929	
Cancer Risk Per Million Construction Duration	0.10						
Cancer Risk Per Million 30-years	0.12						
Cancer Risk Per Million 70-years	**0.12**						