Appendix C: Air Quality Pollutant Emissions, Greenhouse Gas Emissions, and Energy Use Calculations

C1: Operating Emissions from Recovery and Conveyance Pumps

Aquaterra Water Bank Project

Operating Emissions from Recovery and Conveyance Pumps

						lbs/day[3]							tons/yr[4]							MT/yr[4]			
Fuel	# Per Day	HP	Load Factor	Hrs/day	Days/yr	TOG	ROG	NOx	CO	SOx	PM10	PM2.5	TOG	ROG	NOx	CO	SOx	PM10	PM2.5	CO_2	CH_4	N_2O	CO2e
Electric (Recovery)[1, 2]	88	427	0.74	24	151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2,921	0.47	0.057	2,950
Electric (Conveyance)[2]	54	240	0.74	24	151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,103	0.18	0.022	1,114
Electric (Conveyance)[2]	24	195	0.74	24	151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	398	0.06	0.008	402
Electric (Conveyance)[2]	16	145	0.74	24	151	--	--	--	--	--	--	--	--	--	--	--	--	--	--	198	0.03	0.004	199
Natural Gas (Conveyance)	12	195	0.74	24	151	3.58	2.75	28.40	35.36	0.06	5.50	5.06	0.12	0.10	0.99	1.23	0.002	0.19	0.18	1,163	0.03	0.002	1,164
Propane (Conveyance)	8	145	0.74	24	151	3.58	2.75	28.40	35.36	0.06	5.50	5.06	0.12	0.10	0.99	1.23	0.002	0.19	0.18	691	0.03	0.007	694
					Total	7.16	5.50	56.80	70.73	0.13	10.99	10.11	0.25	0.19	1.97	2.46	0.00	0.38	0.35	6,474	0.81	0.100	6,524

NOTES:

[1]GHG emissions from electric pumps are based on the following CalEEMod default electricity intensity factors (lb/MWh):

CO_2	CH_4	N_2O
203.983	0.033	0.004

[2]Power output for recovery pumps is estimated to be 427 hp for a flowrate of 2,500 gpm, based on pump data sheet obtained from Cornell Pump Company, LLC.

[3]Emissions from fuel-fired pumps are based on the following CalEEMod default emission factors:

	CalEEMod Default Emission Factors (g/bhp-hr)									
Fuel	TOG	ROG	NO_x	CO	SO_x	PM10	PM2.5	CO_2	CH_4	N_2O
Natural Gas	0.0391	0.03	0.31	0.386	0.0007	0.06	0.0552	403	0.0108	0.0008
Propane	0.0391	0.03	0.31	0.386	0.0007	0.06	0.0552	483	0.023	0.005

[4]Annual emissions are annualized based on expected pump usage. Conveyance pumps will operate in 46% of project years (11 out of 24 years), and recovery pumps will operate in 42% of project years (10 out of 24 years).

C2: CalEEMod Detailed Report

MAGSA2 v2 Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	MAGSA2 v2
Construction Start Date	9/1/2026
Operational Year	2031
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.90
Precipitation (days)	21.2
Location	36.76702638766707, -120.3117276423
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2526
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.30

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	65.0	Mile	1,580	0.00	—	—	—	—

City Park	4,600	Acre	4,600	0.00	4,600	3,480	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-5	Use Advanced Engine Tiers
Construction	C-6	Use Diesel Particulate Filters
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.59	5.54	44.6	50.4	0.11	1.93	72.1	74.0	1.77	10.7	12.5	—	13,523	13,523	0.50	0.30	5.86	13,632
Mit.	1.53	1.46	8.80	67.1	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,523	13,523	0.50	0.30	5.86	13,632
% Reduced	77%	74%	80%	-33%	—	87%	79%	79%	86%	72%	74%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.54	5.51	44.8	49.0	0.11	1.93	72.1	74.0	1.77	10.7	12.5	—	13,419	13,419	0.50	0.30	0.15	13,522
Mit.	1.48	1.43	8.94	65.7	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,419	13,419	0.50	0.30	0.15	13,522
% Reduced	77%	74%	80%	-34%	—	87%	79%	79%	86%	72%	74%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.52	3.81	30.0	34.8	0.08	1.27	49.2	50.4	1.17	7.42	8.57	—	9,575	9,575	0.35	0.21	1.65	9,648
Mit.	1.05	1.02	6.30	46.9	0.08	0.18	10.5	10.7	0.18	2.10	2.28	—	9,575	9,575	0.35	0.21	1.65	9,648
% Reduced	77%	73%	79%	-35%	—	86%	79%	79%	85%	72%	73%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.83	0.70	5.47	6.34	0.01	0.23	8.97	9.19	0.21	1.35	1.56	—	1,585	1,585	0.06	0.03	0.27	1,597
Mit.	0.19	0.19	1.15	8.57	0.01	0.03	1.92	1.95	0.03	0.38	0.42	—	1,585	1,585	0.06	0.03	0.27	1,597
% Reduced	77%	73%	79%	-35%	—	86%	79%	79%	85%	72%	73%	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	100	27.0	—	—	15.0	—	—	15.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—
Mit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.59	5.54	44.6	50.4	0.11	1.93	72.1	74.0	1.77	10.7	12.5	—	13,523	13,523	0.50	0.30	5.86	13,632
2027	6.35	5.36	41.9	49.7	0.11	1.78	72.1	73.9	1.64	10.7	12.3	—	13,478	13,478	0.49	0.29	5.34	13,583
2028	6.18	5.19	39.6	49.2	0.11	1.65	72.1	73.7	1.52	10.7	12.2	—	13,434	13,434	0.49	0.29	4.85	13,539
2029	6.00	5.03	37.0	48.6	0.11	1.53	72.1	73.6	1.41	10.7	12.1	—	13,389	13,389	0.49	0.29	4.37	13,491

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	6.54	5.51	44.8	49.0	0.11	1.93	72.1	74.0	1.77	10.7	12.5	—	13,419	13,419	0.50	0.30	0.15	13,522
2027	6.33	5.30	42.0	48.4	0.11	1.78	72.1	73.9	1.64	10.7	12.3	—	13,376	13,376	0.50	0.30	0.14	13,477
2028	6.16	5.16	39.7	48.0	0.11	1.65	72.1	73.7	1.52	10.7	12.2	—	13,335	13,335	0.49	0.30	0.13	13,435
2029	5.98	5.01	37.1	47.4	0.11	1.53	72.1	73.6	1.41	10.7	12.1	—	13,291	13,291	0.49	0.29	0.11	13,390
2030	5.78	4.87	35.4	47.2	0.11	1.47	72.1	73.6	1.36	10.7	12.1	—	13,250	13,250	0.49	0.29	0.10	13,348
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.57	1.32	10.7	11.8	0.03	0.46	16.4	16.9	0.42	2.47	2.90	—	3,211	3,211	0.12	0.07	0.60	3,236
2027	4.52	3.81	30.0	34.8	0.08	1.27	49.0	50.3	1.17	7.40	8.57	—	9,575	9,575	0.35	0.21	1.65	9,648
2028	4.41	3.70	28.4	34.6	0.08	1.19	49.2	50.4	1.09	7.42	8.51	—	9,571	9,571	0.35	0.21	1.50	9,644
2029	4.27	3.58	26.5	34.0	0.08	1.10	49.0	50.1	1.01	7.40	8.41	—	9,514	9,514	0.35	0.20	1.35	9,585
2030	0.67	0.56	4.09	5.48	0.01	0.17	7.93	8.10	0.16	1.20	1.35	—	1,533	1,533	0.06	0.03	0.20	1,545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.29	0.24	1.95	2.15	< 0.005	0.08	2.99	3.08	0.08	0.45	0.53	—	532	532	0.02	0.01	0.10	536
2027	0.83	0.70	5.47	6.34	0.01	0.23	8.95	9.18	0.21	1.35	1.56	—	1,585	1,585	0.06	0.03	0.27	1,597
2028	0.81	0.68	5.18	6.31	0.01	0.22	8.97	9.19	0.20	1.35	1.55	—	1,585	1,585	0.06	0.03	0.25	1,597
2029	0.78	0.65	4.83	6.21	0.01	0.20	8.95	9.15	0.18	1.35	1.54	—	1,575	1,575	0.06	0.03	0.22	1,587
2030	0.12	0.10	0.75	1.00	< 0.005	0.03	1.45	1.48	0.03	0.22	0.25	—	254	254	0.01	0.01	0.03	256

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.53	1.46	8.80	67.1	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,523	13,523	0.50	0.30	5.86	13,632
2027	1.49	1.45	8.73	66.7	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,478	13,478	0.49	0.29	5.34	13,583

2028	1.48	1.41	8.67	66.4	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,434	13,434	0.49	0.29	4.85	13,539
2029	1.47	1.40	8.61	66.2	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,389	13,389	0.49	0.29	4.37	13,491
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.48	1.43	8.94	65.7	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,419	13,419	0.50	0.30	0.15	13,522
2027	1.47	1.39	8.88	65.5	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,376	13,376	0.50	0.30	0.14	13,477
2028	1.46	1.38	8.81	65.2	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,335	13,335	0.49	0.30	0.13	13,435
2029	1.45	1.37	8.74	65.1	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,291	13,291	0.49	0.29	0.11	13,390
2030	1.40	1.36	8.68	64.9	0.11	0.25	15.3	15.5	0.25	2.99	3.24	—	13,250	13,250	0.49	0.29	0.10	13,348
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.36	0.34	2.12	15.8	0.03	0.06	3.51	3.57	0.06	0.70	0.76	—	3,211	3,211	0.12	0.07	0.60	3,236
2027	1.05	1.02	6.30	46.9	0.08	0.18	10.5	10.7	0.18	2.10	2.27	—	9,575	9,575	0.35	0.21	1.65	9,648
2028	1.05	0.99	6.27	46.9	0.08	0.18	10.5	10.7	0.18	2.10	2.28	—	9,571	9,571	0.35	0.21	1.50	9,644
2029	1.03	0.98	6.21	46.6	0.08	0.18	10.5	10.7	0.18	2.10	2.27	—	9,514	9,514	0.35	0.20	1.35	9,585
2030	0.17	0.16	1.00	7.51	0.01	0.03	1.70	1.73	0.03	0.34	0.37	—	1,533	1,533	0.06	0.03	0.20	1,545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.07	0.06	0.39	2.88	< 0.005	0.01	0.64	0.65	0.01	0.13	0.14	—	532	532	0.02	0.01	0.10	536
2027	0.19	0.19	1.15	8.57	0.01	0.03	1.92	1.95	0.03	0.38	0.41	—	1,585	1,585	0.06	0.03	0.27	1,597
2028	0.19	0.18	1.14	8.56	0.01	0.03	1.92	1.95	0.03	0.38	0.42	—	1,585	1,585	0.06	0.03	0.25	1,597
2029	0.19	0.18	1.13	8.51	0.01	0.03	1.92	1.95	0.03	0.38	0.41	—	1,575	1,575	0.06	0.03	0.22	1,587
2030	0.03	0.03	0.18	1.37	< 0.005	0.01	0.31	0.31	0.01	0.06	0.07	—	254	254	0.01	0.01	0.03	256

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

Unmit.	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	14.5	14.5	< 0.005	< 0.005	< 0.005	14.7
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.01	0.01	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	10.6	10.6	< 0.005	< 0.005	0.01	10.8
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	1.76	1.76	< 0.005	< 0.005	< 0.005	1.79
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	100	27.0	—	—	15.0	—	—	14.0	—	—	—	—	—	—	—
Unmit.	—	No	No	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	15.8	15.8	< 0.005	< 0.005	0.03	16.1

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	< 0.005	14.7
Area	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	14.5	14.5	< 0.005	< 0.005	< 0.005	14.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.01	10.8
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	10.6	10.6	< 0.005	< 0.005	0.01	10.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.79
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	1.76	1.76	< 0.005	< 0.005	< 0.005	1.79

2.6. Operations Emissions by Sector, Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	15.8	15.8	< 0.005	< 0.005	0.03	16.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	14.5	14.5	< 0.005	< 0.005	< 0.005	14.7
Area	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.01	0.05	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	14.5	14.5	< 0.005	< 0.005	< 0.005	14.7
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	10.6	10.6	< 0.005	< 0.005	0.01	10.8
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	< 0.005	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	0.00	10.6	10.6	< 0.005	< 0.005	0.01	10.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.76	1.76	< 0.005	< 0.005	< 0.005	1.79
Area	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Water	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.00	1.76	1.76	< 0.005	< 0.005	< 0.005	1.79

3. Construction Emissions Details

3.1. Linear, Grading & Excavation (2026) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.25	5.25	43.1	45.5	0.11	1.90	—	1.90	1.75	—	1.75	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	137	137	< 0.005	0.02	0.32	144
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.25	5.25	43.1	45.5	0.11	1.90	—	1.90	1.75	—	1.75	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	137	137	< 0.005	0.02	0.01	144
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.49	1.25	10.3	10.9	0.03	0.45	—	0.45	0.42	—	0.42	—	2,744	2,744	0.11	0.02	—	2,754
Dust From Material Movement	—	—	—	—	—	—	2.89	2.89	—	1.09	1.09	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	13.2	13.2	< 0.005	1.32	1.32	—	32.7	32.7	< 0.005	0.01	0.03	34.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.23	1.88	1.98	< 0.005	0.08	—	0.08	0.08	—	0.08	—	454	454	0.02	< 0.005	—	456
Dust From Material Movement	—	—	—	—	—	—	0.53	0.53	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.42	2.42	< 0.005	0.24	0.24	—	5.42	5.42	< 0.005	< 0.005	0.01	5.68
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.25	4.58	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	908	908	0.01	0.03	3.21	921
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	0.00	0.00
Hauling	0.03	0.01	1.08	0.22	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	983	983	0.02	0.16	2.33	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.31	3.19	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	804	804	0.01	0.03	0.08	814

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	0.00	0.00
Hauling	0.03	0.01	1.15	0.22	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	983	983	0.02	0.16	0.06	1,030
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.33	202
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	0.00	0.00
Hauling	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	235	235	0.01	0.04	0.24	246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.0	33.0	< 0.005	< 0.005	0.05	33.4
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.9	38.9	< 0.005	0.01	0.04	40.8

3.2. Linear, Grading & Excavation (2026) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	137	137	< 0.005	0.02	0.32	144
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	137	137	< 0.005	0.02	0.01	144
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.28	0.28	1.74	14.9	0.03	0.05	—	0.05	0.05	—	0.05	—	2,744	2,744	0.11	0.02	—	2,754
Dust From Material Movement	—	—	—	—	—	—	1.13	1.13	—	0.42	0.42	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	2.12	2.12	< 0.005	0.21	0.21	—	32.7	32.7	< 0.005	0.01	0.03	34.3
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.05	0.05	0.32	2.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	454	454	0.02	< 0.005	—	456
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.08	0.08	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	0.39	0.39	< 0.005	0.04	0.04	—	5.42	5.42	< 0.005	< 0.005	0.01	5.68
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.30	0.27	0.25	4.58	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	908	908	0.01	0.03	3.21	921
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	0.00	0.00

Hauling	0.03	0.01	1.08	0.22	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	983	983	0.02	0.16	2.33	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.24	0.31	3.19	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	804	804	0.01	0.03	0.08	814
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	0.00	0.00
Hauling	0.03	0.01	1.15	0.22	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	983	983	0.02	0.16	0.06	1,030
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.07	0.83	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	199	199	< 0.005	0.01	0.33	202
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	0.00	0.00
Hauling	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.06	0.07	< 0.005	0.02	0.02	—	235	235	0.01	0.04	0.24	246
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	33.0	33.0	< 0.005	< 0.005	0.05	33.4
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.9	38.9	< 0.005	0.01	0.04	40.8

3.3. Linear, Grading & Excavation (2027) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.05	5.08	40.5	45.2	0.11	1.76	—	1.76	1.61	—	1.61	—	11,494	11,494	0.47	0.09	—	11,533
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	134	134	< 0.005	0.02	0.30	140
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	6.05	5.08	40.5	45.2	0.11	1.76	—	1.76	1.61	—	1.61	—	11,494	11,494	0.47	0.09	—	11,533
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	134	134	< 0.005	0.02	0.01	140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.32	3.63	28.9	32.3	0.08	1.25	—	1.25	1.15	—	1.15	—	8,210	8,210	0.33	0.07	—	8,238
Dust From Material Movement	—	—	—	—	—	—	8.64	8.64	—	3.26	3.26	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	39.6	39.6	< 0.005	3.95	3.96	—	95.6	95.6	< 0.005	0.01	0.09	100
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.27	5.89	0.01	0.23	—	0.23	0.21	—	0.21	—	1,359	1,359	0.06	0.01	—	1,364
Dust From Material Movement	—	—	—	—	—	—	1.58	1.58	—	0.59	0.59	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.23	7.23	< 0.005	0.72	0.72	—	15.8	15.8	< 0.005	< 0.005	0.02	16.6

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.22	4.23	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	890	890	0.01	0.03	2.90	902
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	0.00	0.00
Hauling	0.03	0.01	1.05	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	960	960	0.01	0.15	2.14	1,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.96	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	788	788	0.01	0.03	0.08	797
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	0.00	0.00
Hauling	0.03	0.01	1.12	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	961	961	0.01	0.15	0.06	1,006
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.29	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	583	583	0.01	0.02	0.89	591
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	0.00	0.00
Hauling	0.02	0.01	0.78	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	686	686	0.01	0.11	0.66	719
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	96.6	96.6	< 0.005	< 0.005	0.15	97.9
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	114	114	< 0.005	0.02	0.11	119

3.4. Linear, Grading & Excavation (2027) - Mitigated

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

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

Off-Road	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,494	11,494	0.47	0.09	—	11,533
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	134	134	< 0.005	0.02	0.30	140
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,494	11,494	0.47	0.09	—	11,533
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.17	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	134	134	< 0.005	0.02	0.01	140
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.84	5.22	44.5	0.08	0.16	—	0.16	0.16	—	0.16	—	8,210	8,210	0.33	0.07	—	8,238
Dust From Material Movement	—	—	—	—	—	—	3.37	3.37	—	1.27	1.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.12	0.03	< 0.005	< 0.005	6.34	6.35	< 0.005	0.63	0.64	—	95.6	95.6	< 0.005	0.01	0.09	100
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.95	8.12	0.01	0.03	—	0.03	0.03	—	0.03	—	1,359	1,359	0.06	0.01	—	1,364

Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	15.8	15.8	< 0.005	< 0.005	0.02	16.6
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.26	0.22	4.23	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	890	890	0.01	0.03	2.90	902
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	0.00	0.00
Hauling	0.03	0.01	1.05	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	960	960	0.01	0.15	2.14	1,007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.28	2.96	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	788	788	0.01	0.03	0.08	797
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	0.00	0.00
Hauling	0.03	0.01	1.12	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	961	961	0.01	0.15	0.06	1,006
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.17	0.18	2.29	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	583	583	0.01	0.02	0.89	591
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	0.00	0.00
Hauling	0.02	0.01	0.78	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	686	686	0.01	0.11	0.66	719
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.42	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	96.6	96.6	< 0.005	< 0.005	0.15	97.9
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	114	114	< 0.005	0.02	0.11	119

3.5. Linear, Grading & Excavation (2028) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.89	4.95	38.2	45.0	0.11	1.63	—	1.63	1.50	—	1.50	—	11,496	11,496	0.47	0.09	—	11,535
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	130	130	< 0.005	0.02	0.27	137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.89	4.95	38.2	45.0	0.11	1.63	—	1.63	1.50	—	1.50	—	11,496	11,496	0.47	0.09	—	11,535
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	130	130	< 0.005	0.02	0.01	137
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.22	3.55	27.4	32.3	0.08	1.17	—	1.17	1.08	—	1.08	—	8,234	8,234	0.33	0.07	—	8,262
Dust From Material Movement	—	—	—	—	—	—	8.66	8.66	—	3.26	3.26	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	39.7	39.7	< 0.005	3.97	3.97	—	93.4	93.4	< 0.005	0.01	0.08	98.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	4.99	5.89	0.01	0.21	—	0.21	0.20	—	0.20	—	1,363	1,363	0.06	0.01	—	1,368
Dust From Material Movement	—	—	—	—	—	—	1.58	1.58	—	0.60	0.60	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.25	7.25	< 0.005	0.72	0.72	—	15.5	15.5	< 0.005	< 0.005	0.01	16.2
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.20	3.93	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	872	872	0.01	0.03	2.61	884
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	0.00	0.00
Hauling	0.03	0.01	1.02	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	935	935	0.01	0.15	1.97	982
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.26	2.73	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	773	773	0.01	0.03	0.07	782
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	0.00	0.00
Hauling	0.03	0.01	1.09	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	936	936	0.01	0.15	0.05	981
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.16	2.14	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	574	574	0.01	0.02	0.81	581
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	0.00	0.00
Hauling	0.02	0.01	0.76	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	670	670	0.01	0.11	0.61	703
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	95.0	95.0	< 0.005	< 0.005	0.13	96.2

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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	111	111	< 0.005	0.02	0.10	116

3.6. Linear, Grading & Excavation (2028) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,496	11,496	0.47	0.09	—	11,535
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	130	130	< 0.005	0.02	0.27	137
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,496	11,496	0.47	0.09	—	11,535
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	130	130	< 0.005	0.02	0.01	137
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.85	0.84	5.23	44.6	0.08	0.16	—	0.16	0.16	—	0.16	—	8,234	8,234	0.33	0.07	—	8,262
Dust From Material Movement	—	—	—	—	—	—	3.38	3.38	—	1.27	1.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	6.36	6.36	< 0.005	0.64	0.64	—	93.4	93.4	< 0.005	0.01	0.08	98.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.15	0.95	8.14	0.01	0.03	—	0.03	0.03	—	0.03	—	1,363	1,363	0.06	0.01	—	1,368
Dust From Material Movement	—	—	—	—	—	—	0.62	0.62	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	15.5	15.5	< 0.005	< 0.005	0.01	16.2
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.25	0.22	0.20	3.93	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	872	872	0.01	0.03	2.61	884
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	0.00	0.00
Hauling	0.03	0.01	1.02	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	935	935	0.01	0.15	1.97	982
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.26	2.73	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	773	773	0.01	0.03	0.07	782
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	0.00	0.00
Hauling	0.03	0.01	1.09	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	936	936	0.01	0.15	0.05	981
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.16	2.14	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	574	574	0.01	0.02	0.81	581

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	0.00	0.00
Hauling	0.02	0.01	0.76	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	670	670	0.01	0.11	0.61	703
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.39	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	95.0	95.0	< 0.005	< 0.005	0.13	96.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	111	111	< 0.005	0.02	0.10	116

3.7. Linear, Grading & Excavation (2029) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.72	4.81	35.7	44.6	0.11	1.51	—	1.51	1.39	—	1.39	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	127	127	< 0.005	0.02	0.25	133
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.72	4.81	35.7	44.6	0.11	1.51	—	1.51	1.39	—	1.39	—	11,495	11,495	0.47	0.09	—	11,534

Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	127	127	< 0.005	0.02	0.01	133
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	4.09	3.43	25.5	31.9	0.08	1.08	—	1.08	0.99	—	0.99	—	8,210	8,210	0.33	0.07	—	8,239
Dust From Material Movement	—	—	—	—	—	—	8.64	8.64	—	3.26	3.26	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	39.6	39.6	< 0.005	3.95	3.96	—	90.7	90.7	< 0.005	0.01	0.08	95.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	4.65	5.82	0.01	0.20	—	0.20	0.18	—	0.18	—	1,359	1,359	0.06	0.01	—	1,364
Dust From Material Movement	—	—	—	—	—	—	1.58	1.58	—	0.59	0.59	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	7.23	7.23	< 0.005	0.72	0.72	—	15.0	15.0	< 0.005	< 0.005	0.01	15.7
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.17	3.67	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	856	856	0.01	0.03	2.33	868
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	0.00	0.00
Hauling	0.03	0.01	0.99	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	911	911	0.01	0.14	1.79	956

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.23	2.55	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	759	759	0.01	0.03	0.06	768
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	0.00	0.00
Hauling	0.03	0.01	1.05	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	911	911	0.01	0.14	0.05	954
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.13	0.14	1.98	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	562	562	0.01	0.02	0.72	569
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	0.00	0.00
Hauling	0.02	0.01	0.74	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	651	651	0.01	0.10	0.55	682
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.36	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	93.0	93.0	< 0.005	< 0.005	0.12	94.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	108	108	< 0.005	0.02	0.09	113

3.8. Linear, Grading & Excavation (2029) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—

Onsite truck	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	127	127	< 0.005	0.02	0.25	133
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.16	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	127	127	< 0.005	0.02	0.01	133
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.84	5.22	44.5	0.08	0.16	—	0.16	0.16	—	0.16	—	8,210	8,210	0.33	0.07	—	8,239
Dust From Material Movement	—	—	—	—	—	—	3.37	3.37	—	1.27	1.27	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	6.34	6.35	< 0.005	0.63	0.64	—	90.7	90.7	< 0.005	0.01	0.08	95.1
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.15	0.95	8.12	0.01	0.03	—	0.03	0.03	—	0.03	—	1,359	1,359	0.06	0.01	—	1,364
Dust From Material Movement	—	—	—	—	—	—	0.61	0.61	—	0.23	0.23	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	1.16	1.16	< 0.005	0.12	0.12	—	15.0	15.0	< 0.005	< 0.005	0.01	15.7

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.21	0.17	3.67	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	856	856	0.01	0.03	2.33	868
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	0.00	0.00
Hauling	0.03	0.01	0.99	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	911	911	0.01	0.14	1.79	956
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.23	2.55	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	759	759	0.01	0.03	0.06	768
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	0.00	0.00
Hauling	0.03	0.01	1.05	0.21	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	911	911	0.01	0.14	0.05	954
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.13	0.14	1.98	0.00	0.00	0.60	0.60	0.00	0.14	0.14	—	562	562	0.01	0.02	0.72	569
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	0.00	0.00
Hauling	0.02	0.01	0.74	0.15	< 0.005	0.01	0.19	0.20	0.01	0.05	0.07	—	651	651	0.01	0.10	0.55	682
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.03	0.36	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	93.0	93.0	< 0.005	< 0.005	0.12	94.2
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.14	0.03	< 0.005	< 0.005	0.03	0.04	< 0.005	0.01	0.01	—	108	108	< 0.005	0.02	0.09	113

3.9. Linear, Grading & Excavation (2030) - Unmitigated

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

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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.57	4.68	34.1	44.6	0.11	1.45	—	1.45	1.34	—	1.34	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	12.1	12.1	—	4.56	4.56	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	58.9	58.9	< 0.005	5.88	5.88	—	124	124	< 0.005	0.02	0.01	130
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.54	3.93	5.15	0.01	0.17	—	0.17	0.15	—	0.15	—	1,327	1,327	0.05	0.01	—	1,332
Dust From Material Movement	—	—	—	—	—	—	1.40	1.40	—	0.53	0.53	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	6.40	6.40	< 0.005	0.64	0.64	—	14.3	14.3	< 0.005	< 0.005	0.01	15.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.72	0.94	< 0.005	0.03	—	0.03	0.03	—	0.03	—	220	220	0.01	< 0.005	—	220
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.10	0.10	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.17	1.17	< 0.005	0.12	0.12	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.48
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.20	2.38	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	745	745	0.01	0.03	0.05	755
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	0.00	0.00
Hauling	0.03	0.01	1.03	0.20	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	887	887	0.01	0.14	0.04	930
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.2	89.2	< 0.005	< 0.005	0.10	90.4
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.12	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	102	102	< 0.005	0.02	0.08	107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.02	15.0
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.01	17.8

3.10. Linear, Grading & Excavation (2030) - Mitigated

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

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

Off-Road Equipment	1.19	1.17	7.30	62.3	0.11	0.23	—	0.23	0.22	—	0.22	—	11,495	11,495	0.47	0.09	—	11,534
Dust From Material Movement	—	—	—	—	—	—	4.72	4.72	—	1.78	1.78	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.16	0.04	< 0.005	< 0.005	9.43	9.43	< 0.005	0.94	0.95	—	124	124	< 0.005	0.02	0.01	130
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.14	0.84	7.19	0.01	0.03	—	0.03	0.03	—	0.03	—	1,327	1,327	0.05	0.01	—	1,332
Dust From Material Movement	—	—	—	—	—	—	0.54	0.54	—	0.21	0.21	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	1.03	1.03	< 0.005	0.10	0.10	—	14.3	14.3	< 0.005	< 0.005	0.01	15.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.15	1.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	220	220	0.01	< 0.005	—	220
Dust From Material Movement	—	—	—	—	—	—	0.10	0.10	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.19	0.19	< 0.005	0.02	0.02	—	2.36	2.36	< 0.005	< 0.005	< 0.005	2.48
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.18	0.18	0.20	2.38	0.00	0.00	0.85	0.85	0.00	0.20	0.20	—	745	745	0.01	0.03	0.05	755
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	0.00	0.00
Hauling	0.03	0.01	1.03	0.20	0.01	0.02	0.27	0.29	0.02	0.07	0.09	—	887	887	0.01	0.14	0.04	930
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	89.2	89.2	< 0.005	< 0.005	0.10	90.4
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.12	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	102	102	< 0.005	0.02	0.08	107
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.8	14.8	< 0.005	< 0.005	0.02	15.0
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	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.0	17.0	< 0.005	< 0.005	0.01	17.8

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.

4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. 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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

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

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

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
City Park	0.00	0.00	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	—	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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	0.00	0.00	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	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3.2. Mitigated

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

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

Consum Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

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

4.4.2. Mitigated

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

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

4.5.2. Mitigated

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

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

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

4.6.2. Mitigated

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

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

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

4.7.2. Mitigated

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

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

4.8.2. Mitigated

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

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

4.9.2. Mitigated

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

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

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	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
Linear, Grading & Excavation	Linear, Grading & Excavation	9/1/2026	2/28/2030	5.00	913	—

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
Linear, Grading & Excavation	Bore/Drill Rigs	Diesel	Average	1.00	2.26	83.0	0.50
Linear, Grading & Excavation	Excavators	Diesel	Average	2.00	7.39	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	3.00	5.79	148	0.41
Linear, Grading & Excavation	Off-Highway Trucks	Diesel	Average	4.00	4.89	376	0.38
Linear, Grading & Excavation	Plate Compactors	Diesel	Average	3.00	6.39	8.00	0.43

Linear, Grading & Excavation	Rubber Tired Dozers	Diesel	Average	2.00	4.89	367	0.40
Linear, Grading & Excavation	Scrapers	Diesel	Average	2.00	7.56	423	0.48
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.56	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Average	1.00	1.00	367	0.29
Linear, Grading & Excavation	Crawler Tractors	Diesel	Average	2.00	7.00	87.0	0.43

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grading & Excavation	Bore/Drill Rigs	Diesel	Tier 4 Final	1.00	2.26	83.0	0.50
Linear, Grading & Excavation	Excavators	Diesel	Tier 4 Final	2.00	7.39	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Tier 4 Final	3.00	5.79	148	0.41
Linear, Grading & Excavation	Off-Highway Trucks	Diesel	Tier 4 Final	4.00	4.89	376	0.38
Linear, Grading & Excavation	Plate Compactors	Diesel	Average	3.00	6.39	8.00	0.43
Linear, Grading & Excavation	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	4.89	367	0.40
Linear, Grading & Excavation	Scrapers	Diesel	Tier 4 Final	2.00	7.56	423	0.48
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	7.56	84.0	0.37
Linear, Grading & Excavation	Cranes	Diesel	Tier 4 Final	1.00	1.00	367	0.29
Linear, Grading & Excavation	Crawler Tractors	Diesel	Tier 4 Final	2.00	7.00	87.0	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	60.0	20.0	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	0.00	HHDT,MHDT
Linear, Grading & Excavation	Hauling	8.00	36.3	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	20.0	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	60.0	20.0	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	0.00	0.00	HHDT,MHDT
Linear, Grading & Excavation	Hauling	8.00	36.3	HHDT
Linear, Grading & Excavation	Onsite truck	2.00	20.0	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 (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grading & Excavation	0.00	0.00	1,580	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	1,580	100%
City Park	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
2029	0.00	204	0.03	< 0.005
2030	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	2.00	0.00	0.00	521	20.0	0.00	0.00	5,214

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	2.00	0.00	0.00	521	20.0	0.00	0.00	5,214

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

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

5.10.4. Landscape Equipment - Mitigated

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)
City Park	0.00	204	0.0330	0.0040	0.00

5.11.2. Mitigated

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)
City Park	0.00	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)
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
City Park	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

5.14.2. Mitigated

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

5.15.2. Mitigated

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

5.18.1.2. Mitigated

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

5.18.1.2. Mitigated

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)

5.18.2.2. Mitigated

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	—	annual days of extreme heat
Extreme Precipitation	—	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	—	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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	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	N/A	N/A	N/A	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 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	71.8
AQ-PM	66.9
AQ-DPM	22.5
Drinking Water	100.0
Lead Risk Housing	70.8
Pesticides	94.9
Toxic Releases	49.7
Traffic	4.03
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	94.3
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	58.7
Solid Waste	98.3
Sensitive Population	—
Asthma	68.8
Cardio-vascular	62.2
Low Birth Weights	13.7
Socioeconomic Factor Indicators	—
Education	90.7
Housing	12.0
Linguistic	71.9
Poverty	74.2
Unemployment	28.2

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	17.22058257
Employed	7.4554087
Median HI	12.17759528
Education	—
Bachelor's or higher	13.1271654
High school enrollment	100
Preschool enrollment	44.69395611
Transportation	—
Auto Access	27.10124471
Active commuting	30.51456435
Social	—
2-parent households	82.56127294
Voting	32.46503272
Neighborhood	—
Alcohol availability	93.26318491
Park access	2.194276915
Retail density	1.552675478
Supermarket access	2.399589375
Tree canopy	2.566405749
Housing	—
Homeownership	32.88848967
Housing habitability	55.80649301
Low-inc homeowner severe housing cost burden	57.11535994
Low-inc renter severe housing cost burden	77.46695753
Uncrowded housing	28.08931092
Health Outcomes	—

Insured adults	14.70550494
Arthritis	0.0
Asthma ER Admissions	33.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	52.3
Cognitively Disabled	4.0
Physically Disabled	8.1
Heart Attack ER Admissions	18.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	70.5
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	43.1
Elderly	48.0

English Speaking	22.3
Foreign-born	51.2
Outdoor Workers	0.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	98.5
Traffic Density	3.1
Traffic Access	0.0
Other Indices	—
Hardship	82.3
Other Decision Support	—
2016 Voting	33.3

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	72.0
Healthy Places Index Score for Project Location (b)	15.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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
Construction: Trips and VMT	Based on project estimates.
Land Use	Based on project information
Operations: Off-Road Equipment	Modified based on project information. 54 electric pumps for 500 cfs lift stations, 24 electric pumps for 400 cfs lift stations, and 16 electric pumps for 300 cfs lift stations. 88 electric pumps for recovery wells.
Operations: Off-Road Equipment EF	Represent natural gas and propane pumps.
Operations: Water and Waste Water	No water and wastewater usage.
Operations: Solid Waste	No solid waste generation.
Operations: Refrigerants	No refrigerant produced.
Construction: Off-Road Equipment	Modified based on project estimates.
Construction: Construction Phases	Modified based on project estimates.

C3: Recovery Well Pump Data Sheet

Pump Data Sheet - Cornell

Company:
Name:
Date: 10/27/2025

Pump:

Size:	6822MX	Dimensions:	
Type:	Clear Liquids	Suction:	8 in
Synch Speed:	1800 rpm	Discharge:	6 in
Dia:	21.25 in		
Curve:	6822MX18		

Fluid:

Name:	Water		
SG:	1	Vapor Pressure:	0.256 psi a
Density:	62.4 lb/ft³	Atm Pressure:	14.7 psi a
Viscosity:	1.1 cP		
Temperature:	60 °F	Margin Ratio:	1

Search Criteria:

Flow:	2500 US gpm	Near Miss:	---
Head:	500 ft	Static Head:	450 ft

Pump Limits:

Temperature:	250 °F	Sphere Size:	2 in
Wkg Pressure:	350 psi g		

Motor:

Standard:	NEMA	Size:	700 hp
Enclosure:	TEFC	Speed:	1800 rpm
Frame:	Custom		
Sizing Criteria:	Max Power on Design Curve		

Pump Selection Warnings:

None

--- Duty Point ---

Flow:	2511 US gpm
Head:	500 ft
Eff:	74.4%
Power:	427 hp
NPSHr:	13.3 ft
Speed:	1780 rpm

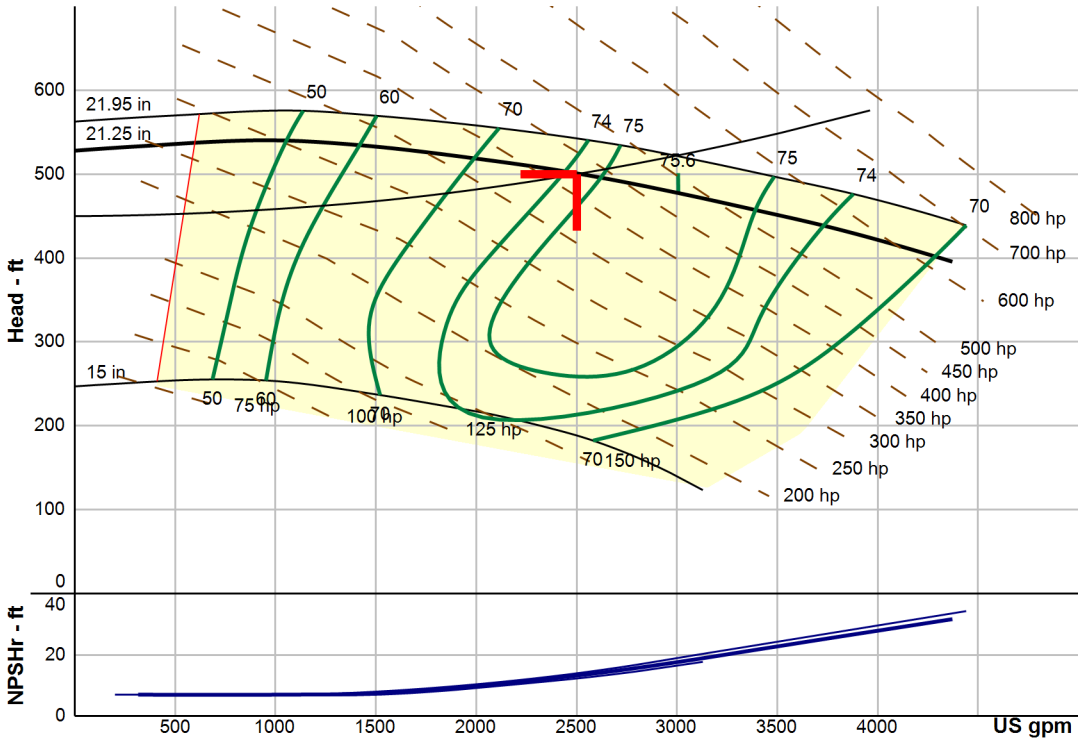
--- Design Curve ---

Shutoff Head:	528 ft
Shutoff dP:	229 psi
Min Flow:	601 US gpm

BEP: 75.6% @ 3007 US gpm
NOL Power:
631 hp @ 4372 US gpm

--- Max Curve ---

Max Power:
704 hp @ 4441 US gpm



Min flow line represents the absolute lowest flow pump can operate. For flow rates to the left of the first efficiency line on the curve, consult your Cornell Sales representative. Actual efficiency and HP may vary depending on mounting configuration. Refer to Catalog curve.

Performance Evaluation:

Flow	Speed	Head	Efficiency	Power	NPSHr
US gpm	rpm	ft	%	hp	ft
3000	1780	478	76	479	17.6
2500	1780	501	74	425	13.2
2000	1780	519	70	374	9.85
1500	1780	532	61	327	7.62
1000	1780	540	48	284	7

C4: Health Risk Assessment Calculations

```
HARP2 - HRACalc (dated 22118) 10/31/2025 7:22:57 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
**********
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: HighEnd

**********
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 16
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 25

**********
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments.  The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: False
Dermal: False
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

**********
INHALATION

Daily breathing rate: Moderate8HR

**Worker Adjustment Factors**
Worker adjustment factors enabled: NO

**Fraction at time at home**
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

**********
TIER 2 SETTINGS
Tier2 not used.

**********

Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIWCancerRisk.csv
Calculating chronic risk
Chronic risk saved to:
```

```
C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIWNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIWNCAcuteRisk.csv
HRA ran successfully

```

HARP2 - HRACalc (dated 22118) 10/31/2025 7:20:14 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 1

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 1
2<9 Years Bin: 0
2<16 Years Bin: 0
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIRCancerRisk.csv
Calculating chronic risk
Chronic risk saved to:
C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIRNCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\s.sridharan\Desktop\HRA\HRA1\AquaterraMEIRNCAcuteRisk.csv
HRA ran successfully

```

HARP2 - HRACalc (dated 22118) 6/6/2025 12:37:23 PM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 3
Total Exposure Duration: 70

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 13
16<30 Years Bin: 0
16 to 70 Years Bin: 57

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: True
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: LongTerm24HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: ON

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIR_CancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIR_NCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIR_NCAcuteRisk.csv
HRA ran successfully

```

HARP2 - HRACalc (dated 22118) 6/10/2025 11:25:24 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 3
Total Exposure Duration: 25

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 13
16<30 Years Bin: 12
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIW_CancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIW_NCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsMEIW_NCAcuteRisk.csv
HRA ran successfully

```

HARP2 - HRACalc (dated 22118) 6/10/2025 11:40:22 AM - Output Log

GLCs loaded successfully
Pollutants loaded successfully
****
RISK SCENARIO SETTINGS

Receptor Type: Worker
Scenario: All
Calculation Method: Derived

****
EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: 5
Total Exposure Duration: 9

Exposure Duration Bin Distribution
3rd Trimester Bin: 0
0<2 Years Bin: 0
2<9 Years Bin: 0
2<16 Years Bin: 9
16<30 Years Bin: 0
16 to 70 Years Bin: 0

****
PATHWAYS ENABLED

NOTE: Inhalation is always enabled and used for all assessments. The remaining pathways are only used for cancer and noncancer chronic assessments.

Inhalation: True
Soil: True
Dermal: True
Mother's milk: False
Water: False
Fish: False
Homegrown crops: False
Beef: False
Dairy: False
Pig: False
Chicken: False
Egg: False

****
INHALATION

Daily breathing rate: Moderate8HR

Worker Adjustment Factors
Worker adjustment factors enabled: NO

Fraction at time at home
3rd Trimester to 16 years: OFF
16 years to 70 years: OFF

****
SOIL & DERMAL PATHWAY SETTINGS

Deposition rate (m/s): 0.05
Soil mixing depth (m): 0.01
Dermal climate: Mixed

****
TIER 2 SETTINGS

```
Tier2 adjustments were used in this assessment.  Please see the input file for details.
Tier2 - What was changed: ED or start age changed|
Calculating cancer risk
Cancer risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsSR-Worker_CancerRisk.csv
Calculating chronic risk
Chronic risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsSR-Worker_NCChronicRisk.csv
Calculating acute risk
Acute risk saved to: C:\Users\tiffanie.ramos\OneDrive - Tetra Tech, Inc\Sridharan, Sucharitha's files - Aquaterra\HRA\AquaterraOpsSR-Worker_NCAcuteRisk.csv
HRA ran successfully

```