

Appendix B:
Air Quality Supplemental Information

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Appendix B: Supplemental Air Quality Supporting Information

Table of Contents

Additional Import Hauling Trips Calculation	1
Updated CalEEMod for Main Site with Mitigated Tier 4 Interim Equipment	2
Updated Health Risk Assessment Results with Tier 4 Interim Equipment	78

Arroyo Lago Project Emission Calcs of 160k Cubic Yard of Import Soil

Soil (cubic yard)	160,000
Each haul truck capacity (cubic yard) based on CalEEMod	16
Haul truck trips consider round trips	20,000
Mass grading days	120
Haul truck trips per day	167
Trip length one-way (mile)	30
Miles traveled a day (mile)	5,000
ROG run exhaust emission factor for HDDT (g/mile)	0.016
ROG idle emission factor for HDDT (g/trip)	0.299
NOx run exhaust emission factor for HDDT (g/mile)	1.661
NOx idle emission factor for HDDT (g/trip)	3.854
CO run exhaust emission factor for HDDT (g/mile)	0.533
CO idle emission factor for HDDT (g/trip)	4.868
PM10 run exhaust emission factor for HDDT (g/mile)	0.026
PM10 idle emission factor for HDDT (g/trip)	0.002
PM2.5 run exhaust emission factor for HDDT (g/mile)	0.025
PM2.5 idle emission factor for HDDT (g/trip)	0.002
ROG emissions (lb/day)	0.3
NOx emissions (lb/day)	19.7
CO emissions (lb/day)	7.7
PM10 emissions (lb/day)	0.29
PM2.5 emissions (lb/day)	0.28
NOx BAAQMD threshold (lb/day)	54
PM2.5 threshold (lb/day)	54

Alameda County Arroyo Lago Residential Main Site - Tier4i Custom Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year, Unmitigated
 - 2.3. Construction Emissions by Year, Mitigated
 - 2.4. Operations Emissions Compared Against Thresholds
 - 2.5. Operations Emissions by Sector, Unmitigated
 - 2.6. Operations Emissions by Sector, Mitigated
- 3. Construction Emissions Details
 - 3.1. 1 Mass Grading (2025) - Unmitigated
 - 3.2. 1 Mass Grading (2025) - Mitigated

3.3. 4 Building Construction (2025) - Unmitigated

3.4. 4 Building Construction (2025) - Mitigated

3.5. 4 Building Construction (2026) - Unmitigated

3.6. 4 Building Construction (2026) - Mitigated

3.7. 4 Building Construction (2027) - Unmitigated

3.8. 4 Building Construction (2027) - Mitigated

3.9. 3 Main Site and Frontage Improvement (2025) - Unmitigated

3.10. 3 Main Site and Frontage Improvement (2025) - Mitigated

3.11. 3 Main Site and Frontage Improvement (2026) - Unmitigated

3.12. 3 Main Site and Frontage Improvement (2026) - Mitigated

3.13. 5 Architectural Coating (2027) - Unmitigated

3.14. 5 Architectural Coating (2027) - Mitigated

3.15. 2 Utility Trenching (2025) - Unmitigated

3.16. 2 Utility Trenching (2025) - Mitigated

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

4.1.2. Mitigated

Appendix A

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

4.2.2. Electricity Emissions By Land Use - Mitigated

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

4.2.4. Natural Gas Emissions By Land Use - Mitigated

4.3. Area Emissions by Source

4.3.1. Unmitigated

4.3.2. Mitigated

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

4.4.2. Mitigated

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.5.2. Mitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.6.2. Mitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.7.2. Mitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.8.2. Mitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.2.2. Mitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.3.2. Mitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.9.2. Mitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.10.4. Landscape Equipment - Mitigated

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.11.2. Mitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.12.2. Mitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.13.2. Mitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.14.2. Mitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.15.2. Mitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Alameda County Arroyo Lago Residential Main Site - Tier4i
Construction Start Date	3/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	37.8
Location	37.678757, -121.856277
County	Alameda
City	Unincorporated
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1683
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

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
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Single Family Housing	194	Dwelling Unit	18.5	659,212	0.70	—	694	0.7 acre of park is included as landscape
Parking Lot	7.46	Acre	7.46	0.00	0.00	—	—	Interior roadways
Other Non-Asphalt Surfaces	0.62	Acre	0.62	0.00	0.00	—	—	Parcel J to T
Parking Lot	6.41	Acre	6.41	0.00	0.00	—	—	Frontage - Busch Road and east boundary road improvement

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

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.	50.7	50.3	63.0	60.8	0.12	2.71	24.6	27.3	2.49	5.68	8.17	—	13,194	13,194	0.53	0.44	8.06	13,246
Mit.	49.8	49.7	37.1	70.7	0.12	0.35	24.6	24.9	0.32	5.68	5.99	—	13,194	13,194	0.53	0.44	8.06	13,246
% Reduced	2%	1%	41%	-16%	—	87%	—	9%	87%	—	27%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	50.7	50.3	63.0	60.6	0.12	2.71	24.6	27.3	2.49	5.68	8.17	—	13,171	13,171	0.54	0.46	0.22	13,222
Mit.	49.8	49.7	37.1	70.5	0.12	0.36	24.6	24.9	0.34	5.68	5.99	—	13,171	13,171	0.54	0.46	0.22	13,222

% Reduced	2%	1%	41%	-16%	—	87%	—	9%	86%	—	27%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	27.3	27.1	30.1	31.9	0.06	1.27	7.99	9.26	1.17	1.92	3.09	—	6,998	6,998	0.28	0.30	2.63	7,053
Mit.	26.7	26.6	21.0	36.2	0.06	0.30	7.99	8.24	0.27	1.92	2.16	—	6,998	6,998	0.28	0.30	2.63	7,053
% Reduced	2%	2%	31%	-13%	—	77%	—	11%	77%	—	30%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.98	4.94	5.50	5.81	0.01	0.23	1.46	1.69	0.21	0.35	0.56	—	1,159	1,159	0.05	0.05	0.44	1,168
Mit.	4.88	4.86	3.82	6.60	0.01	0.05	1.46	1.50	0.05	0.35	0.39	—	1,159	1,159	0.05	0.05	0.44	1,168
% Reduced	2%	2%	31%	-13%	—	77%	—	11%	77%	—	30%	—	—	—	—	—	—	—
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	No	Yes	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Mit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Mit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—

Mit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
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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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.22	6.92	63.0	60.8	0.12	2.71	24.6	27.3	2.49	5.68	8.17	—	13,194	13,194	0.53	0.14	4.06	13,246
2026	3.44	2.82	25.0	33.0	0.06	0.96	1.35	2.31	0.87	0.34	1.22	—	8,051	8,051	0.34	0.44	8.06	8,199
2027	50.7	50.3	15.0	21.9	0.04	0.55	0.84	1.39	0.50	0.20	0.71	—	4,649	4,649	0.17	0.14	3.70	4,698
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	8.21	6.91	63.0	60.6	0.12	2.71	24.6	27.3	2.49	5.68	8.17	—	13,171	13,171	0.54	0.46	0.22	13,222
2026	3.43	2.81	25.3	32.7	0.06	0.96	1.35	2.31	0.87	0.34	1.22	—	8,000	8,000	0.34	0.44	0.21	8,141
2027	50.7	50.3	15.1	21.6	0.04	0.55	0.84	1.39	0.50	0.20	0.71	—	4,599	4,599	0.18	0.14	0.10	4,645
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	4.01	3.37	30.1	31.9	0.06	1.27	7.99	9.26	1.17	1.92	3.09	—	6,998	6,998	0.28	0.16	1.29	7,053
2026	2.88	2.38	21.0	27.6	0.05	0.80	1.05	1.85	0.73	0.26	1.00	—	6,465	6,465	0.26	0.30	2.63	6,565
2027	27.3	27.1	9.62	13.7	0.02	0.35	0.51	0.86	0.32	0.12	0.44	—	2,928	2,928	0.11	0.09	1.00	2,957
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.73	0.61	5.50	5.81	0.01	0.23	1.46	1.69	0.21	0.35	0.56	—	1,159	1,159	0.05	0.03	0.21	1,168
2026	0.53	0.43	3.83	5.03	0.01	0.15	0.19	0.34	0.13	0.05	0.18	—	1,070	1,070	0.04	0.05	0.44	1,087
2027	4.98	4.94	1.76	2.50	< 0.005	0.06	0.09	0.16	0.06	0.02	0.08	—	485	485	0.02	0.01	0.17	490

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.99	1.93	37.1	70.7	0.12	0.31	24.6	24.9	0.31	5.68	5.99	—	13,194	13,194	0.53	0.14	4.06	13,246
2026	2.10	1.79	24.1	36.0	0.06	0.35	1.35	1.70	0.32	0.34	0.67	—	8,051	8,051	0.34	0.44	8.06	8,199
2027	49.8	49.7	15.1	24.2	0.04	0.22	0.84	1.06	0.21	0.20	0.41	—	4,649	4,649	0.17	0.14	3.70	4,698
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	2.12	1.92	37.1	70.5	0.12	0.36	24.6	24.9	0.34	5.68	5.99	—	13,171	13,171	0.54	0.46	0.22	13,222
2026	2.09	1.78	24.4	35.6	0.06	0.35	1.35	1.70	0.32	0.34	0.67	—	8,000	8,000	0.34	0.44	0.21	8,141
2027	49.8	49.7	15.2	23.9	0.04	0.22	0.84	1.06	0.21	0.20	0.41	—	4,599	4,599	0.18	0.14	0.10	4,645
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	1.46	1.33	21.0	36.2	0.06	0.25	7.99	8.24	0.24	1.92	2.16	—	6,998	6,998	0.28	0.16	1.29	7,053
2026	1.73	1.49	20.3	30.2	0.05	0.30	1.05	1.34	0.27	0.26	0.54	—	6,465	6,465	0.26	0.30	2.63	6,565
2027	26.7	26.6	9.67	15.2	0.02	0.14	0.51	0.65	0.13	0.12	0.26	—	2,928	2,928	0.11	0.09	1.00	2,957
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.27	0.24	3.82	6.60	0.01	0.05	1.46	1.50	0.04	0.35	0.39	—	1,159	1,159	0.05	0.03	0.21	1,168
2026	0.32	0.27	3.70	5.52	0.01	0.05	0.19	0.25	0.05	0.05	0.10	—	1,070	1,070	0.04	0.05	0.44	1,087
2027	4.88	4.86	1.76	2.77	< 0.005	0.03	0.09	0.12	0.02	0.02	0.05	—	485	485	0.02	0.01	0.17	490

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.	25.3	24.6	7.97	61.5	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	17,562	17,663	11.1	0.62	45.6	18,171

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.0	23.3	8.70	49.1	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	16,815	16,916	11.1	0.68	5.78	17,401
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.4	23.7	7.80	52.2	0.13	0.27	11.3	11.6	0.26	2.87	3.13	101	16,093	16,194	11.1	0.65	22.4	16,688
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.45	4.32	1.42	9.52	0.02	0.05	2.06	2.11	0.05	0.52	0.57	16.7	2,664	2,681	1.84	0.11	3.70	2,763
Exceeds (Daily Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Average Daily)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	54.0	54.0	—	—	82.0	—	—	54.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	No	No	—	—	No	—	—	No	—	—	—	—	—	—	—	—	—
Exceeds (Annual)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Threshold	—	10.0	10.0	—	—	15.0	—	—	10.0	—	—	—	—	—	—	—	—	—
Unmit.	Yes	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
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Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074
Area	17.8	17.8	0.75	11.3	< 0.005	0.06	—	0.06	0.06	—	0.06	0.00	846	846	0.02	< 0.005	—	847
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	25.3	24.6	7.97	61.5	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	17,562	17,663	11.1	0.62	45.6	18,171
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333
Area	16.8	16.8	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	24.0	23.3	8.70	49.1	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	16,815	16,916	11.1	0.68	5.78	17,401
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.86	6.34	5.47	45.8	0.12	0.08	11.3	11.4	0.08	2.87	2.94	—	12,193	12,193	0.58	0.60	17.7	12,404
Area	17.3	17.2	0.07	5.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	34.7	34.7	< 0.005	< 0.005	—	34.7
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	24.4	23.7	7.80	52.2	0.13	0.27	11.3	11.6	0.26	2.87	3.13	101	16,093	16,194	11.1	0.65	22.4	16,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054
Area	3.15	3.14	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.74	5.74	< 0.005	< 0.005	—	5.75
Energy	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	636	636	0.07	< 0.005	—	639
Water	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5
Waste	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78
Total	4.45	4.32	1.42	9.52	0.02	0.05	2.06	2.11	0.05	0.52	0.57	16.7	2,664	2,681	1.84	0.11	3.70	2,763

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	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074
Area	17.8	17.8	0.75	11.3	< 0.005	0.06	—	0.06	0.06	—	0.06	0.00	846	846	0.02	< 0.005	—	847
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	25.3	24.6	7.97	61.5	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	17,562	17,663	11.1	0.62	45.6	18,171
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333
Area	16.8	16.8	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	24.0	23.3	8.70	49.1	0.14	0.32	11.6	11.9	0.31	2.94	3.25	101	16,815	16,916	11.1	0.68	5.78	17,401
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.86	6.34	5.47	45.8	0.12	0.08	11.3	11.4	0.08	2.87	2.94	—	12,193	12,193	0.58	0.60	17.7	12,404
Area	17.3	17.2	0.07	5.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	34.7	34.7	< 0.005	< 0.005	—	34.7
Energy	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	3,840	3,840	0.41	0.02	—	3,858
Water	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Waste	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	24.4	23.7	7.80	52.2	0.13	0.27	11.3	11.6	0.26	2.87	3.13	101	16,093	16,194	11.1	0.65	22.4	16,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054
Area	3.15	3.14	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.74	5.74	< 0.005	< 0.005	—	5.75
Energy	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	636	636	0.07	< 0.005	—	639
Water	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5
Waste	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78
Total	4.45	4.32	1.42	9.52	0.02	0.05	2.06	2.11	0.05	0.52	0.57	16.7	2,664	2,681	1.84	0.11	3.70	2,763

3. Construction Emissions Details

3.1. 1 Mass Grading (2025) - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix A

16

Off-Road Equipment	8.07	6.78	62.7	59.2	0.12	2.71	—	2.71	2.49	—	2.49	—	12,818	12,818	0.52	0.10	—	12,862
Dust From Material Movement	—	—	—	—	—	—	9.53	9.53	—	4.14	4.14	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.18	0.12	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	51.2	51.2	0.01	0.01	0.08	54.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	8.07	6.78	62.7	59.2	0.12	2.71	—	2.71	2.49	—	2.49	—	12,818	12,818	0.52	0.10	—	12,862
Dust From Material Movement	—	—	—	—	—	—	9.53	9.53	—	4.14	4.14	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.19	0.12	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	51.6	51.6	0.01	0.01	< 0.005	54.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	20.6	19.5	0.04	0.89	—	0.89	0.82	—	0.82	—	4,214	4,214	0.17	0.03	—	4,229
Dust From Material Movement	—	—	—	—	—	—	3.13	3.13	—	1.36	1.36	—	—	—	—	—	—	—
Onsite truck	0.01	< 0.005	0.06	0.04	< 0.005	< 0.005	4.34	4.34	< 0.005	0.43	0.43	—	16.9	16.9	< 0.005	< 0.005	0.01	17.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.41	3.76	3.55	0.01	0.16	—	0.16	0.15	—	0.15	—	698	698	0.03	0.01	—	700

Dust From Material Movement	—	—	—	—	—	—	0.57	0.57	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.79	0.79	< 0.005	0.08	0.08	—	2.79	2.79	< 0.005	< 0.005	< 0.005	2.94
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.08	1.44	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	325	325	0.01	0.01	1.29	330
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	0.00	0.00	0.00	0.00	0.00	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	0.13	0.12	0.12	1.28	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	301	301	0.01	0.01	0.03	305
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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.04	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	99.7	99.7	< 0.005	< 0.005	0.18	101
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	0.00	0.00	0.00	0.00	0.00	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	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	0.03	16.8
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. 1 Mass Grading (2025) - Mitigated

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

Appendix A

18

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	1.85	1.79	36.8	69.1	0.12	0.31	—	0.31	0.30	—	0.30	—	12,818	12,818	0.52	0.10	—	12,862
Dust From Material Movement	—	—	—	—	—	—	9.53	9.53	—	4.14	4.14	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.18	0.12	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	51.2	51.2	0.01	0.01	0.08	54.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.85	1.79	36.8	69.1	0.12	0.31	—	0.31	0.30	—	0.30	—	12,818	12,818	0.52	0.10	—	12,862
Dust From Material Movement	—	—	—	—	—	—	9.53	9.53	—	4.14	4.14	—	—	—	—	—	—	—
Onsite truck	0.01	0.01	0.19	0.12	< 0.005	< 0.005	14.7	14.7	< 0.005	1.47	1.47	—	51.6	51.6	0.01	0.01	< 0.005	54.2
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.61	0.59	12.1	22.7	0.04	0.10	—	0.10	0.10	—	0.10	—	4,214	4,214	0.17	0.03	—	4,229
Dust From Material Movement	—	—	—	—	—	—	3.13	3.13	—	1.36	1.36	—	—	—	—	—	—	—

Alameda County Arroyo Lago Residential Main Site - Tier4i Custom Report, 1/1/2025

Onsite truck	0.01	< 0.005	0.06	0.04	< 0.005	< 0.005	4.34	4.34	< 0.005	0.43	0.43	—	16.9	16.9	< 0.005	< 0.005	0.01	17.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.11	2.21	4.15	0.01	0.02	—	0.02	0.02	—	0.02	—	698	698	0.03	0.01	—	700
Dust From Material Movement	—	—	—	—	—	—	0.57	0.57	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.79	0.79	< 0.005	0.08	0.08	—	2.79	2.79	< 0.005	< 0.005	< 0.005	2.94
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.13	0.08	1.44	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	325	325	0.01	0.01	1.29	330
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	0.00	0.00	0.00	0.00	0.00	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	0.13	0.12	0.12	1.28	0.00	0.00	0.31	0.31	0.00	0.07	0.07	—	301	301	0.01	0.01	0.03	305
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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.04	0.03	0.41	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	99.7	99.7	< 0.005	< 0.005	0.18	101
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	0.00	0.00	0.00	0.00	0.00	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	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.5	16.5	< 0.005	< 0.005	0.03	16.8

Appendix A

20

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	0.00	0.00	0.00	0.00	0.00	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. 4 Building Construction (2025) - 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	2.02	1.69	15.7	18.9	0.03	0.67	—	0.67	0.62	—	0.62	—	3,419	3,419	0.14	0.03	—	3,431
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.02	1.69	15.7	18.9	0.03	0.67	—	0.67	0.62	—	0.62	—	3,419	3,419	0.14	0.03	—	3,431
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.71	6.57	7.93	0.01	0.28	—	0.28	0.26	—	0.26	—	1,433	1,433	0.06	0.01	—	1,438
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.15	0.13	1.20	1.45	< 0.005	0.05	—	0.05	0.05	—	0.05	—	237	237	0.01	< 0.005	—	238
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.24	0.15	2.68	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	605	605	0.01	0.02	2.40	614
Vendor	0.04	0.02	0.68	0.30	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	552	552	0.02	0.08	1.48	578
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.23	0.22	2.38	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	561	561	0.02	0.02	0.06	569
Vendor	0.04	0.02	0.71	0.30	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	553	553	0.02	0.08	0.04	577
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	0.96	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	237	237	0.01	0.01	0.44	240
Vendor	0.02	0.01	0.29	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	232	232	0.01	0.03	0.27	242
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.07	39.8
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.3	38.3	< 0.005	0.01	0.04	40.1
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	0.00	0.00

3.4. 4 Building Construction (2025) - 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	—	Appendix A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	— ²²	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.90	14.4	21.1	0.03	0.22	—	0.22	0.20	—	0.20	—	3,419	3,419	0.14	0.03	—	3,431
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.90	14.4	21.1	0.03	0.22	—	0.22	0.20	—	0.20	—	3,419	3,419	0.14	0.03	—	3,431
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.38	6.02	8.85	0.01	0.09	—	0.09	0.09	—	0.09	—	1,433	1,433	0.06	0.01	—	1,438
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	1.10	1.62	< 0.005	0.02	—	0.02	0.02	—	0.02	—	237	237	0.01	< 0.005	—	238
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendix A																		23

Worker	0.24	0.24	0.15	2.68	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	605	605	0.01	0.02	2.40	614
Vendor	0.04	0.02	0.68	0.30	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	552	552	0.02	0.08	1.48	578
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.24	0.23	0.22	2.38	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	561	561	0.02	0.02	0.06	569
Vendor	0.04	0.02	0.71	0.30	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	553	553	0.02	0.08	0.04	577
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.08	0.96	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	237	237	0.01	0.01	0.44	240
Vendor	0.02	0.01	0.29	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	232	232	0.01	0.03	0.27	242
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.2	39.2	< 0.005	< 0.005	0.07	39.8
Vendor	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.3	38.3	< 0.005	0.01	0.04	40.1
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	0.00	0.00

3.5. 4 Building Construction (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	1.93	1.61	14.9	18.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,418	3,418	0.14	0.03	—	3,430

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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.93	1.61	14.9	18.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	1.93	1.61	14.9	18.8	0.03	0.60	—	0.60	0.55	—	0.55	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.35	0.29	2.71	3.44	0.01	0.11	—	0.11	0.10	—	0.10	—	566	566	0.02	< 0.005	—	568
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.15	2.53	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	593	593	0.01	0.02	2.18	603
Vendor	0.04	0.02	0.65	0.29	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	1.42	569
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendix A																		25

Worker	0.23	0.20	0.20	2.22	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	550	550	0.01	0.02	0.06	558
Vendor	0.04	0.02	0.68	0.29	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	0.04	568
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.17	2.15	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	554	554	0.01	0.02	0.94	562
Vendor	0.04	0.02	0.67	0.29	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	0.62	568
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.7	91.7	< 0.005	< 0.005	0.16	93.1
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.9	89.9	< 0.005	0.01	0.10	94.1
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	0.00	0.00

3.6. 4 Building Construction (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	1.00	0.90	14.3	21.1	0.03	0.21	—	0.21	0.20	—	0.20	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.00	0.90	14.3	21.1	0.03	0.21	—	0.21	0.20	—	0.20	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	0.90	14.3	21.1	0.03	0.21	—	0.21	0.20	—	0.20	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.16	2.62	3.85	0.01	0.04	—	0.04	0.04	—	0.04	—	566	566	0.02	< 0.005	—	568
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.21	0.15	2.53	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	593	593	0.01	0.02	2.18	603
Vendor	0.04	0.02	0.65	0.29	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	1.42	569
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.20	0.20	2.22	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	550	550	0.01	0.02	0.06	558
Vendor	0.04	0.02	0.68	0.29	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	0.04	568
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	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.17	2.15	0.00	0.00	0.56	0.56	0.00	0.13	0.13	—	554	554	0.01	0.02	0.94	562
Vendor	0.04	0.02	0.67	0.29	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	—	543	543	0.02	0.08	0.62	568
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.39	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	91.7	91.7	< 0.005	< 0.005	0.16	93.1
Vendor	0.01	< 0.005	0.12	0.05	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	89.9	89.9	< 0.005	0.01	0.10	94.1
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	0.00	0.00

3.7. 4 Building Construction (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	1.87	1.57	14.3	18.8	0.03	0.54	—	0.54	0.50	—	0.50	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.87	1.57	14.3	18.8	0.03	0.54	—	0.54	0.50	—	0.50	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	1.00	9.10	12.0	0.02	0.34	—	0.34	0.32	—	0.32	—	2,182	2,182	0.09	0.02	—	2,189
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.66	2.19	< 0.005	0.06	—	0.06	0.06	—	0.06	—	361	361	0.01	< 0.005	—	362
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.13	2.36	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	582	582	0.01	0.02	1.97	591
Vendor	0.04	0.02	0.62	0.28	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	532	532	0.02	0.08	1.33	558
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.18	2.09	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	540	540	0.01	0.02	0.05	548
Vendor	0.04	0.02	0.66	0.28	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	533	533	0.02	0.08	0.03	557
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	347	347	0.01	0.01	0.54	352
Vendor	0.03	0.01	0.41	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	340	340	0.01	0.05	0.37	356
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	0.00	0.00
Annual	—	Appendix A	—	—	—	—	—	—	—	—	—	—	—	—	—	—	— ²⁹	—

Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57.5	57.5	< 0.005	< 0.005	0.09	58.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.3	56.3	< 0.005	0.01	0.06	58.9
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	0.00	0.00

3.8. 4 Building Construction (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 Equipment	1.00	0.90	14.3	21.1	0.03	0.21	—	0.21	0.20	—	0.20	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	0.90	14.3	21.1	0.03	0.21	—	0.21	0.20	—	0.20	—	3,418	3,418	0.14	0.03	—	3,430
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.64	0.57	9.14	13.5	0.02	0.14	—	0.14	0.13	—	0.13	—	2,182	2,182	0.09	0.02	—	2,189
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	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.67	2.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	361	361	0.01	< 0.005	—	362
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.20	0.13	2.36	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	582	582	0.01	0.02	1.97	591
Vendor	0.04	0.02	0.62	0.28	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	532	532	0.02	0.08	1.33	558
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.19	0.18	2.09	0.00	0.00	0.58	0.58	0.00	0.14	0.14	—	540	540	0.01	0.02	0.05	548
Vendor	0.04	0.02	0.66	0.28	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	533	533	0.02	0.08	0.03	557
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.12	0.10	1.29	0.00	0.00	0.36	0.36	0.00	0.08	0.08	—	347	347	0.01	0.01	0.54	352
Vendor	0.03	0.01	0.41	0.18	< 0.005	< 0.005	0.09	0.10	< 0.005	0.03	0.03	—	340	340	0.01	0.05	0.37	356
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.24	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	57.5	57.5	< 0.005	< 0.005	0.09	58.3
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.3	56.3	< 0.005	0.01	0.06	58.9
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	0.00	0.00

3.9. 3 Main Site and Frontage Improvement (2025) - 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	0.95	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.17	0.14	1.35	1.80	< 0.005	0.06	—	0.06	0.06	—	0.06	—	273	273	0.01	< 0.005	—	274
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	0.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	45.2	45.2	< 0.005	< 0.005	—	45.4
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
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	0.14	0.04	2.42	0.93	0.01	0.04	0.50	0.54	0.04	0.14	0.17	—	1,895	1,895	0.10	0.31	0.11	1,988
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.9	21.9	< 0.005	< 0.005	0.04	22.3
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	0.43	0.17	< 0.005	0.01	0.09	0.10	0.01	0.02	0.03	—	342	342	0.02	0.06	0.33	360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.63	3.63	< 0.005	< 0.005	0.01	3.69
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	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.7	56.7	< 0.005	0.01	0.05	59.6

3.10. 3 Main Site and Frontage Improvement (2025) - 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 Equipm ent	0.51	0.46	6.78	10.6	0.01	0.10	—	0.10	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,517
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.09	0.08	1.23	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	273	273	0.01	< 0.005	—	274
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.02	0.02	0.22	0.35	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	45.2	45.2	< 0.005	< 0.005	—	45.4
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.51	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	120	120	< 0.005	0.01	0.01	122
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	0.14	0.04	2.42	0.93	0.01	0.04	0.50	0.54	0.04	0.14	0.17	—	1,895	1,895	0.10	0.31	0.11	1,988

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	21.9	21.9	< 0.005	< 0.005	0.04	22.3
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	0.43	0.17	< 0.005	0.01	0.09	0.10	0.01	0.02	0.03	—	342	342	0.02	0.06	0.33	360
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.63	3.63	< 0.005	< 0.005	0.01	3.69
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	0.08	0.03	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	56.7	56.7	< 0.005	0.01	0.05	59.6

3.11. 3 Main Site and Frontage Improvement (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	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.43	3.98	5.55	0.01	0.18	—	0.18	0.16	—	0.16	—	844	844	0.03	0.01	—	847
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	1.01	< 0.005	0.03	—	0.03	0.03	—	0.03	—	140	140	0.01	< 0.005	—	140
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.47	129
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	0.14	0.04	2.22	0.89	0.01	0.04	0.50	0.54	0.02	0.14	0.16	—	1,858	1,858	0.10	0.29	3.98	1,952
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	0.01	0.01	120
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	0.14	0.04	2.34	0.90	0.01	0.04	0.50	0.54	0.02	0.14	0.16	—	1,859	1,859	0.10	0.29	0.10	1,949
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Appendix A																		36

Worker	0.03	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.5	66.5	< 0.005	< 0.005	0.11	67.5
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	0.08	0.02	1.28	0.50	0.01	0.02	0.27	0.29	0.01	0.08	0.09	—	1,039	1,039	0.06	0.16	0.96	1,090
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.02	11.2
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	0.01	< 0.005	0.23	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	172	172	0.01	0.03	0.16	180

3.12. 3 Main Site and Frontage Improvement (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 Equipm ent	0.50	0.45	6.75	10.6	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.50	0.45	6.75	10.6	0.01	0.10	—	0.10	0.09	—	0.09	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.25	3.77	5.92	0.01	0.05	—	0.05	0.05	—	0.05	—	844	844	0.03	0.01	—	847
Paving	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.69	1.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	140	140	0.01	< 0.005	—	140
Paving	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.54	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	< 0.005	< 0.005	0.47	129
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	0.14	0.04	2.22	0.89	0.01	0.04	0.50	0.54	0.02	0.14	0.16	—	1,858	1,858	0.10	0.29	3.98	1,952
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.48	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	118	118	< 0.005	0.01	0.01	120
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	0.14	0.04	2.34	0.90	0.01	0.04	0.50	0.54	0.02	0.14	0.16	—	1,859	1,859	0.10	0.29	0.10	1,949
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.26	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.5	66.5	< 0.005	< 0.005	0.11	67.5
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	0.08	0.02	1.28	0.50	0.01	0.02	0.27	0.29	0.01	0.08	0.09	—	1,039	1,039	0.06	0.16	0.96	1,090
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.0	11.0	< 0.005	< 0.005	0.02	11.2
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	0.01	< 0.005	0.23	0.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	172	172	0.01	0.03	0.16	180

3.13. 5 Architectural Coating (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	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architectural Coatings	48.5	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road 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
Architectural Coatings	48.5	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architect ural Coating s	25.9	25.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipm ent	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Architect ural Coating s	4.73	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.47	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.39	118
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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.42	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.41	110

Appendix A

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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.1	58.1	< 0.005	< 0.005	0.09	59.0
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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.62	9.62	< 0.005	< 0.005	0.02	9.76
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. 5 Architectural Coating (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 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
Architectural Coatings	48.5	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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road 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
Architectural Coatings	48.5	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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road 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
Architectural Coatings	25.9	25.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road 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
Architectural Coatings	4.73	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.47	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	0.39	118
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

Appendix A

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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.42	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	108	108	< 0.005	< 0.005	0.01	110
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.22	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	58.1	58.1	< 0.005	< 0.005	0.09	59.0
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	0.00	0.00	0.00	0.00	0.00	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	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.62	9.62	< 0.005	< 0.005	0.02	9.76
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	0.00	0.00	0.00	0.00	0.00	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. 2 Utility Trenching (2025) - 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	0.34	0.29	2.12	2.46	< 0.005	0.08	—	0.08	0.08	—	0.08	—	349	349	0.01	< 0.005	—	350
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	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.12	2.46	< 0.005	0.08	—	0.08	0.08	—	0.08	—	349	349	0.01	< 0.005	—	350
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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.81	< 0.005	0.03	—	0.03	0.03	—	0.03	—	115	115	< 0.005	< 0.005	—	115
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.0	19.0	< 0.005	< 0.005	—	19.1
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.17	44.0
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.2	40.2	< 0.005	< 0.005	< 0.005	40.7

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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
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	0.00	0.00	0.00	0.00	0.00	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	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.20	2.20	< 0.005	< 0.005	< 0.005	2.23
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. 2 Utility Trenching (2025) - 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	0.34	0.29	2.12	2.46	< 0.005	0.08	—	0.08	0.08	—	0.08	—	349	349	0.01	< 0.005	—	350
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	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.12	2.46	< 0.005	0.08	—	0.08	0.08	—	0.08	—	349	349	0.01	< 0.005	—	350

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	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.70	0.81	< 0.005	0.03	—	0.03	0.03	—	0.03	—	115	115	< 0.005	< 0.005	—	115
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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.0	19.0	< 0.005	< 0.005	—	19.1
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	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.17	44.0
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	0.00	0.00	0.00	0.00	0.00	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	0.02	0.17	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.2	40.2	< 0.005	< 0.005	< 0.005	40.7
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	0.00	0.00	0.00	0.00	0.00	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	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
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

Appendix A

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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.20	2.20	< 0.005	< 0.005	< 0.005	2.23
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	0.00	0.00	0.00	0.00	0.00	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

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054

4.1.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	7.20	6.69	4.96	49.3	0.13	0.08	11.6	11.7	0.08	2.94	3.02	—	12,851	12,851	0.54	0.57	40.9	13,074

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	6.96	6.42	5.79	47.9	0.12	0.08	11.6	11.7	0.08	2.94	3.02	—	12,133	12,133	0.62	0.62	1.06	12,333
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	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	1.25	1.16	1.00	8.35	0.02	0.01	2.06	2.08	0.01	0.52	0.54	—	2,019	2,019	0.10	0.10	2.92	2,054

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	671	671	0.11	0.01	—	677
	Appendix A																49	

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	296	296	0.05	0.01	—	299
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	966	966	0.16	0.02	—	976
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	671	671	0.11	0.01	—	677
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	296	296	0.05	0.01	—	299
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	966	966	0.16	0.02	—	976
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	111	111	0.02	< 0.005	—	112
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	49.0	49.0	0.01	< 0.005	—	49.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	160	160	0.03	< 0.005	—	162

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	671	671	0.11	0.01	—	677
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	296	296	0.05	0.01	—	299
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	966	966	0.16	0.02	—	976
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	671	671	0.11	0.01	—	677
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	296	296	0.05	0.01	—	299
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	966	966	0.16	0.02	—	976
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	111	111	0.02	< 0.005	—	112
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	49.0	49.0	0.01	< 0.005	—	49.5
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	160	160	0.03	< 0.005	—	162

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	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	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	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	0.26	0.13	2.26	0.96	0.01	0.18	—	0.18	0.18	—	0.18	—	2,874	2,874	0.25	0.01	—	2,882
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	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	0.05	0.02	0.41	0.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	476	476	0.04	< 0.005	—	477

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.08	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Consumer Products	14.2	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.59	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.02	0.97	0.11	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Total	17.8	17.8	0.75	11.3	< 0.005	0.06	—	0.06	0.06	—	0.06	0.00	846	846	0.02	< 0.005	—	847
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Appendix A

54

Hearths	0.08	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Consumer Products	14.2	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.59	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	16.8	16.8	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.34	3.34	< 0.005	< 0.005	—	3.34
Consumer Products	2.58	2.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.09	0.09	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.41
Total	3.15	3.14	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.74	5.74	< 0.005	< 0.005	—	5.75

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.08	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818

Consumer Product	14.2	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.59	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.02	0.97	0.11	11.0	< 0.005	0.01	—	0.01	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Total	17.8	17.8	0.75	11.3	< 0.005	0.06	—	0.06	0.06	—	0.06	0.00	846	846	0.02	< 0.005	—	847
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.08	0.04	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Consumer Products	14.2	14.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.59	2.59	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	16.8	16.8	0.64	0.27	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	817	817	0.02	< 0.005	—	818
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	3.34	3.34	< 0.005	< 0.005	—	3.34
Consumer Products	2.58	2.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.47	0.47	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipm	0.09	0.09	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.40	2.40	< 0.005	< 0.005	—	2.41
Total	3.15	3.14	0.01	0.99	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	5.74	5.74	< 0.005	< 0.005	—	5.75

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	Appendix A	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—57	81.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Appendix A

58

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.2	24.9	38.1	1.36	0.03	—	81.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.19	4.13	6.31	0.22	0.01	—	13.5

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Appendix A

60

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	87.4	0.00	87.4	8.74	0.00	—	306
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	14.5	0.00	14.5	1.45	0.00	—	50.6

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4.72	4.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Single Family Housing	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.78	0.78

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)

Equipm ent 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)

Equipm ent Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
	Appendix A																63	

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	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)

Equipm ent	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
1 Mass Grading	Grading	3/1/2025	6/28/2025	7.00	120	Mass grading and surcharge
4 Building Construction	Building Construction	8/1/2025	8/21/2027	7.00	751	Vertical construction
3 Main Site and Frontage Improvement	Paving	10/27/2025	7/23/2026	7.00	270	Including top site improvement and frontage construction on Busch Road, east boundary
5 Architectural Coating	Architectural Coating	2/8/2027	8/21/2027	7.00	195	Interior and exterior coating
2 Utility Trenching	Trenching	6/29/2025	10/26/2025	7.00	120	For underground utilities

5.2. Off-Road Equipment

5.2.1. Unmitigated

Appendix A

65

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
1 Mass Grading	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
1 Mass Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
1 Mass Grading	Graders	Diesel	Average	3.00	8.00	148	0.41
1 Mass Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
1 Mass Grading	Scrapers	Diesel	Average	3.00	8.00	423	0.48
4 Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
4 Building Construction	Forklifts	Diesel	Average	5.00	8.00	82.0	0.20
4 Building Construction	Generator Sets	Diesel	Average	5.00	8.00	14.0	0.74
4 Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	5.00	7.00	84.0	0.37
4 Building Construction	Welders	Electric	Average	5.00	8.00	46.0	0.45
3 Main Site and Frontage Improvement	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
3 Main Site and Frontage Improvement	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
3 Main Site and Frontage Improvement	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
5 Architectural Coating	Air Compressors	Electric	Average	5.00	6.00	37.0	0.48
2 Utility Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
2 Utility Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
1 Mass Grading	Rubber Tired Dozers	Diesel	Tier 4 Interim	3.00	8.00	367	0.40

1 Mass Grading	Tractors/Loaders/Back hoes	Diesel	Tier 4 Interim	3.00	8.00	84.0	0.37
1 Mass Grading	Graders	Diesel	Tier 4 Interim	3.00	8.00	148	0.41
1 Mass Grading	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
1 Mass Grading	Scrapers	Diesel	Tier 4 Interim	3.00	8.00	423	0.48
4 Building Construction	Cranes	Diesel	Tier 4 Interim	1.00	7.00	367	0.29
4 Building Construction	Forklifts	Diesel	Tier 4 Interim	5.00	8.00	82.0	0.20
4 Building Construction	Generator Sets	Diesel	Average	5.00	8.00	14.0	0.74
4 Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Interim	5.00	7.00	84.0	0.37
4 Building Construction	Welders	Electric	Average	5.00	8.00	46.0	0.45
3 Main Site and Frontage Improvement	Pavers	Diesel	Tier 4 Interim	2.00	8.00	81.0	0.42
3 Main Site and Frontage Improvement	Paving Equipment	Diesel	Tier 4 Interim	2.00	8.00	89.0	0.36
3 Main Site and Frontage Improvement	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
5 Architectural Coating	Air Compressors	Electric	Average	5.00	6.00	37.0	0.48
2 Utility Trenching	Trenchers	Diesel	Average	1.00	8.00	40.0	0.50
2 Utility Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
1 Mass Grading	—	—	—	—
1 Mass Grading Appendix A	Worker	37.5	11.7	LDA,LDT1,LDT2 67

1 Mass Grading	Vendor	—	8.40	HHDT,MHDT
1 Mass Grading	Hauling	0.00	20.0	HHDT
1 Mass Grading	Onsite truck	10.0	1.00	HHDT
2 Utility Trenching	—	—	—	—
2 Utility Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
2 Utility Trenching	Vendor	—	8.40	HHDT,MHDT
2 Utility Trenching	Hauling	0.00	20.0	HHDT
2 Utility Trenching	Onsite truck	—	—	HHDT
4 Building Construction	—	—	—	—
4 Building Construction	Worker	69.8	11.7	LDA,LDT1,LDT2
4 Building Construction	Vendor	20.7	8.40	HHDT,MHDT
4 Building Construction	Hauling	0.00	20.0	HHDT
4 Building Construction	Onsite truck	—	—	HHDT
5 Architectural Coating	—	—	—	—
5 Architectural Coating	Worker	14.0	11.7	LDA,LDT1,LDT2
5 Architectural Coating	Vendor	—	8.40	HHDT,MHDT
5 Architectural Coating	Hauling	0.00	20.0	HHDT
5 Architectural Coating	Onsite truck	—	—	HHDT
3 Main Site and Frontage Improvement	—	—	—	—
3 Main Site and Frontage Improvement	Worker	15.0	11.7	LDA,LDT1,LDT2
3 Main Site and Frontage Improvement	Vendor	—	8.40	HHDT,MHDT
3 Main Site and Frontage Improvement	Hauling	27.0	20.0	HHDT
3 Main Site and Frontage Improvement	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Appendix A

68

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
1 Mass Grading	—	—	—	—
1 Mass Grading	Worker	37.5	11.7	LDA,LDT1,LDT2
1 Mass Grading	Vendor	—	8.40	HHDT,MHDT
1 Mass Grading	Hauling	0.00	20.0	HHDT
1 Mass Grading	Onsite truck	10.0	1.00	HHDT
2 Utility Trenching	—	—	—	—
2 Utility Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
2 Utility Trenching	Vendor	—	8.40	HHDT,MHDT
2 Utility Trenching	Hauling	0.00	20.0	HHDT
2 Utility Trenching	Onsite truck	—	—	HHDT
4 Building Construction	—	—	—	—
4 Building Construction	Worker	69.8	11.7	LDA,LDT1,LDT2
4 Building Construction	Vendor	20.7	8.40	HHDT,MHDT
4 Building Construction	Hauling	0.00	20.0	HHDT
4 Building Construction	Onsite truck	—	—	HHDT
5 Architectural Coating	—	—	—	—
5 Architectural Coating	Worker	14.0	11.7	LDA,LDT1,LDT2
5 Architectural Coating	Vendor	—	8.40	HHDT,MHDT
5 Architectural Coating	Hauling	0.00	20.0	HHDT
5 Architectural Coating	Onsite truck	—	—	HHDT
3 Main Site and Frontage Improvement	—	—	—	—
3 Main Site and Frontage Improvement	Worker	15.0	11.7	LDA,LDT1,LDT2
3 Main Site and Frontage Improvement	Vendor	—	8.40	HHDT,MHDT
3 Main Site and Frontage Improvement	Hauling	27.0	20.0	HHDT

3 Main Site and Frontage Improvement	Onsite truck	—	—	HHDT
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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 Architectural Coating	1,334,904	444,968	0.00	0.00	37,871

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)
1 Mass Grading	0.00	0.00	720	0.00	—
3 Main Site and Frontage Improvement	0.00	0.00	0.00	0.00	16.6

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Single Family Housing	2.14	0%

Parking Lot	7.46	100%
Other Non-Asphalt Surfaces	0.62	0%
Parking Lot	6.41	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	617	204	0.03	< 0.005
2026	617	204	0.03	< 0.005
2027	1,015	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
Single Family Housing	2,159	2,159	2,159	788,115	16,426	16,426	16,426	5,995,499
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMt/Weekday	VMt/Saturday	VMt/Sunday	VMt/Year
Single Family Housing	2,159	2,159	2,159	788,115	16,426	16,426	16,426	5,995,499
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Appendix A

71

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	39
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	155
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Single Family Housing	—
Wood Fireplaces	0
Gas Fireplaces	39
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	155
Conventional Wood Stoves	0

Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

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)
1334904.3	444,968	0.00	0.00	37,871

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)
Single Family Housing	1,199,862	204	0.0330	0.0040	8,967,053
Parking Lot	284,663	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Parking Lot Appendix A	244,596	204	0.0330	0.0040	0.00 73

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)
Single Family Housing	1,199,862	204	0.0330	0.0040	8,967,053
Parking Lot	284,663	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Parking Lot	244,596	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)
Single Family Housing	6,889,105	9.72
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Single Family Housing	6,889,105	9.72
Parking Lot	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	162	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Single Family Housing	162	—
Parking Lot	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	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
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Single Family Housing	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Single Family Housing	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
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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
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5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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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
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5.16.2. Process Boilers

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

Equipment Type	Fuel Type
—	—

8. User Changes to Default Data

Screen	Justification
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Land Use	The land use summary is based on site plan and applicant-provided information. The square footage of the 49 ADUs are included in the "Single Family Housing" land use.
Construction: Construction Phases	The schedule is based on applicant-provided information. The construction would occur 7 days a week for conservative estimates.
Construction: Trips and VMT	27 one-ways trips are added for paving phase. On-site truck trips are added to grading phase to account for truck trips near the project site based on applicant-provided information.
Construction: Architectural Coatings	Based on applicant-provided information, no interior painting is needed.
Construction: Paving	The paved area is based on land use summary.
Operations: Architectural Coatings	Based on applicant-provided information, the interior painting is not needed.
Construction: Off-Road Equipment	Several equipment are adjusted to be electric as a common construction practice. Number of forklift, generator sets, tractors, and welders are increased to 5 each day to account for overlapped construction during building construction phase.
Operations: Vehicle Data	Based on traffic study, total 2,159 trips would be generated daily. The trip rates are adjusted to include trips generated by 49 ADU.

Alameda County Arroyo Lago Residential Project

Project Construction Emissions for HRA - PM10 Exhaust (DPM) Mitigated Scenario (Tier 4i)

On-Site Emissions	PM ₁₀ (Exhaust) lbs
Main Site Mass Grading (2025)	37.34
Main Site Utility Trenching (2025)	9.98
Main Site and Frontage Improvement (2025)	6.84
Main Site and Frontage Improvement (2026)	19.90
Main Site Building Construction (2025)	33.11
Main Site Building Construction (2026)	78.09
Main Site Building Construction (2027)	49.33
Main Site Architectural Coating (2027)	0
Main Site Sum	234.58
Off-site Construction Sum (2025 - 2026)	179.73
Total Onsite	

Off-Site Hauling Trip Emissions	PM10 (Exhaust) lbs
Main Site	15.41
Off-Site	2.81
Total Offsite	18.22

Exhaust PM10 Inputs applied in AERMOD and HARP

Construction Year 2.50 year

Hours per Day 8

Days per Week 7

Variable Factor 3.00

Area Source 1 234.58 lbs

On-Site Emissions 93.83 lbs/year

Area Source 2 179.73 lbs

On-Site Emissions 59.91 lbs/year

Off-Site Emissions

Haul1 0.001 lbs/year

Haul2 0.001 lbs/year

Haul3 0.002 lbs/year

Line Volume Sources (hauling) AERMOD Input Adjustments

Roadway Segment	Length (Meters)	Total Trips during Construction	PM10 (Exhaust) Emission Rate per Vehicle (gram/mile)	PM10 (Exhaust) Emission Rate (gram)	PM10 (Exhaust) Emission Rate (pounds)
Haul1	619	4,845	0.000379	1.17	0.0026
Haul2	3091	3,645	0.000379	3.00	0.0066
Haul3	1082	17,892	0.000379	6.25	0.0138

Totals 0.01

Add 0.25 miles of emissions to include additional idling

GLCs loaded successfully
Pollutants loaded successfully
Pathway receptors loaded successfully

RISK SCENARIO SETTINGS

Receptor Type: Resident
Scenario: All
Calculation Method: HighEnd

EXPOSURE DURATION PARAMETERS FOR CANCER

Start Age: -0.25
Total Exposure Duration: 2.5

Exposure Duration Bin Distribution
3rd Trimester Bin: 0.25
0<2 Years Bin: 2
2<9 Years Bin: 0.5
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: 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: RMP

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

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 breakdown by pollutant and receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iCancerRisk.csv
Cancer risk total by receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iCancerRiskSumByRec.csv
Calculating chronic risk
Chronic risk breakdown by pollutant and receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iNCChronicRisk.csv
Chronic risk total by receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iNCChronicRiskSumByRec.csv
Calculating acute risk
Acute risk breakdown by pollutant and receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iNCAcuteRisk.csv
Acute risk total by receptor saved to: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iNCAcuteRiskSumByRec.csv
HRA ran successfully

PROJECT INFORMATION

HARP Version: 22118

Project Name: HARP_CON

Project Output Directory: F:\Jobs\58240001\HARP_CON

HARP Database: NA

FACILITY INFORMATION

Origin

X (m):0

Y (m):0

Zone:1

No. of Sources:0

No. of Buildings:0

EMISSION INVENTORY

No. of Pollutants:5

No. of Background Pollutants:0

Emissions

ScrID	StkID	ProID	PolID	PolAbbrev	Multi	Annual Ems (lbs/yr)	MaxHr Ems (lbs/hr)	MWAF
CON	0	0	9901	DieselExhPM	1	93.83	0	1
HAUL1	0	0	9901	DieselExhPM	1	0.001	0	1
HAUL2	0	0	9901	DieselExhPM	1	0.001	0	1
HAUL3	0	0	9901	DieselExhPM	1	0.002	0	1
CON2	0	0	9901	DieselExhPM	1	59.91	0	1

Background

PolID	PolAbbrev	Conc (ug/m^3)	MWAF
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Ground level concentration files (\glc\)

9901MAXHR.txt

9901PER.txt

POLLUTANT HEALTH INFORMATION

Health Database: C:\HARP2\Tables\HEALTH17320.mdb

Health Table Version: HEALTH23279

Official: True

PolID	PolAbbrev	InhCancer	OralCancer	AcuteREL	InhChronicREL	OralChronicREL	InhChronic8HRREL
9901	DieselExhPM	1.1			5		

Mitigated Scenario, Tier 4 interim (Highest 50 Receptors)

*HARP - HRACalc v22118 1/1/2025 4:58:40 AM - Cancer Risk - Input File: F:\Jobs\58240001\HARP_CON\hra\CON_MIT_Tier4iHRAInput.hra

REC	X	Y	CONC	POLID	POLABREV	RISK_SUM	SCENARIO	INH_RISK	SOIL_RISK	DERMAL_RISK	MMILK_RISK	WATER_RISK	FISH_RISK	CROP_RISK	BEEF_RISK	DAIRY_RISK	PIG_RISK	CHICKEN_RISK	EGG_RISK
40	600737.4	4170751	0.011836	9901	DieselExhPM	4.22E-06	2.5YrCancerRMP_Inh_FAH16to70	4.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
41	600736.8	4170765	0.011803	9901	DieselExhPM	4.21E-06	2.5YrCancerRMP_Inh_FAH16to70	4.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
42	600736.2	4170780	0.011761	9901	DieselExhPM	4.19E-06	2.5YrCancerRMP_Inh_FAH16to70	4.19E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
43	600735.5	4170796	0.011701	9901	DieselExhPM	4.17E-06	2.5YrCancerRMP_Inh_FAH16to70	4.17E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
44	600734.9	4170810	0.011618	9901	DieselExhPM	4.14E-06	2.5YrCancerRMP_Inh_FAH16to70	4.14E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
45	600734.2	4170825	0.011526	9901	DieselExhPM	4.11E-06	2.5YrCancerRMP_Inh_FAH16to70	4.11E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
46	600733.5	4170842	0.011395	9901	DieselExhPM	4.06E-06	2.5YrCancerRMP_Inh_FAH16to70	4.06E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
47	600732.8	4170858	0.011267	9901	DieselExhPM	4.02E-06	2.5YrCancerRMP_Inh_FAH16to70	4.02E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
48	600732.2	4170873	0.011123	9901	DieselExhPM	3.96E-06	2.5YrCancerRMP_Inh_FAH16to70	3.96E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
49	600731.5	4170887	0.010949	9901	DieselExhPM	3.90E-06	2.5YrCancerRMP_Inh_FAH16to70	3.90E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
50	600730.8	4170905	0.01068	9901	DieselExhPM	3.81E-06	2.5YrCancerRMP_Inh_FAH16to70	3.81E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
51	600730.1	4170920	0.010367	9901	DieselExhPM	3.69E-06	2.5YrCancerRMP_Inh_FAH16to70	3.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
52	600729.5	4170935	0.010017	9901	DieselExhPM	3.57E-06	2.5YrCancerRMP_Inh_FAH16to70	3.57E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	600729.5	4170949	0.009765	9901	DieselExhPM	3.48E-06	2.5YrCancerRMP_Inh_FAH16to70	3.48E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
39	600727.4	4170734	0.009728	9901	DieselExhPM	3.47E-06	2.5YrCancerRMP_Inh_FAH16to70	3.47E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	600728.8	4170964	0.009285	9901	DieselExhPM	3.31E-06	2.5YrCancerRMP_Inh_FAH16to70	3.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
74	600728.1	4170980	0.008623	9901	DieselExhPM	3.07E-06	2.5YrCancerRMP_Inh_FAH16to70	3.07E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
75	600727.5	4170994	0.007848	9901	DieselExhPM	2.80E-06	2.5YrCancerRMP_Inh_FAH16to70	2.80E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
76	600726.8	4171011	0.006636	9901	DieselExhPM	2.36E-06	2.5YrCancerRMP_Inh_FAH16to70	2.36E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
33	600694.5	4170817	0.006031	9901	DieselExhPM	2.15E-06	2.5YrCancerRMP_Inh_FAH16to70	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
26	600691.5	4170858	0.005602	9901	DieselExhPM	2.00E-06	2.5YrCancerRMP_Inh_FAH16to70	2.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
38	600686.3	4170732	0.005544	9901	DieselExhPM	1.98E-06	2.5YrCancerRMP_Inh_FAH16to70	1.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
35	600686.3	4170778	0.005516	9901	DieselExhPM	1.97E-06	2.5YrCancerRMP_Inh_FAH16to70	1.97E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
34	600685.6	4170791	0.00545	9901	DieselExhPM	1.94E-06	2.5YrCancerRMP_Inh_FAH16to70	1.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
36	600683.6	4170761	0.005368	9901	DieselExhPM	1.91E-06	2.5YrCancerRMP_Inh_FAH16to70	1.91E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
77	600726.1	4171026	0.005266	9901	DieselExhPM	1.88E-06	2.5YrCancerRMP_Inh_FAH16to70	1.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
37	600680.3	4170746	0.005189	9901	DieselExhPM	1.85E-06	2.5YrCancerRMP_Inh_FAH16to70	1.85E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
25	600690.3	4170911	0.005018	9901	DieselExhPM	1.79E-06	2.5YrCancerRMP_Inh_FAH16to70	1.79E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
32	600679.6	4170816	0.005001	9901	DieselExhPM	1.78E-06	2.5YrCancerRMP_Inh_FAH16to70	1.78E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
27	600677.3	4170859	0.004631	9901	DieselExhPM	1.65E-06	2.5YrCancerRMP_Inh_FAH16to70	1.65E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
53	600689.6	4170949	0.004325	9901	DieselExhPM	1.54E-06	2.5YrCancerRMP_Inh_FAH16to70	1.54E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
31	600663.8	4170816	0.004173	9901	DieselExhPM	1.49E-06	2.5YrCancerRMP_Inh_FAH16to70	1.49E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
24	600675.7	4170910	0.004034	9901	DieselExhPM	1.44E-06	2.5YrCancerRMP_Inh_FAH16to70	1.44E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
28	600660.4	4170870	0.003681	9901	DieselExhPM	1.31E-06	2.5YrCancerRMP_Inh_FAH16to70	1.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
71	600691.5	4170981	0.003668	9901	DieselExhPM	1.31E-06	2.5YrCancerRMP_Inh_FAH16to70	1.31E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
30	600650.2	4170816	0.003616	9901	DieselExhPM	1.29E-06	2.5YrCancerRMP_Inh_FAH16to70	1.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
78	600725.4	4171043	0.003408	9901	DieselExhPM	1.21E-06	2.5YrCancerRMP_Inh_FAH16to70	1.21E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
54	600673.3	4170948	0.003305	9901	DieselExhPM	1.18E-06	2.5YrCancerRMP_Inh_FAH16to70	1.18E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
23	600660.2	4170909	0.003266	9901	DieselExhPM	1.16E-06	2.5YrCancerRMP_Inh_FAH16to70	1.16E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
29	600648.2	4170871	0.003181	9901	DieselExhPM	1.13E-06	2.5YrCancerRMP_Inh_FAH16to70	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
130	600633.3	4170794	0.003158	9901	DieselExhPM	1.13E-06	2.5YrCancerRMP_Inh_FAH16to70	1.13E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
70	600676.2	4170980	0.00277	9901	DieselExhPM	9.87E-07	2.5YrCancerRMP_Inh_FAH16to70	9.87E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
22	600645	4170909	0.002698	9901	DieselExhPM	9.61E-07	2.5YrCancerRMP_Inh_FAH16to70	9.61E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
55	600658.9	4170947	0.002671	9901	DieselExhPM	9.52E-07	2.5YrCancerRMP_Inh_FAH16to70	9.52E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
131	600600.5	4170753	0.002509	9901	DieselExhPM	8.94E-07	2.5YrCancerRMP_Inh_FAH16to70	8.94E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
132	600600.6	4170774	0.002444	9901	DieselExhPM	8.71E-07	2.5YrCancerRMP_Inh_FAH16to70	8.71E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
79	600724.8	4171056	0.002438	9901	DieselExhPM	8.69E-07</													