Appendix S-3

Air Quality, Greenhouse Gas, &
Energy Memorandum (Alternative 6)

DATE: October 15, 2025
TO: Timothy Reeves, Meridian Park D-1, LLC
FROM: Haseeb Qureshi, Michael Tirohn, Urban Crossroads, Inc.
JOB NO: 13445-13 Alt 6 Memo

SUBJECT: MERIDIAN D-1 GATEWAY AVIATION CENTER AIR QUALITY, GREENHOUSE GAS & ENERGY ASSESSMENT

Urban Crossroads, Inc. is pleased to provide the following Air Quality, Greenhouse Gas & Energy Assessment for Alternative 6 to the Meridian D-1 Gateway Aviation Center Project, which is located in unincorporated Riverside County.

APPROACH AND METHODOLOGY

In May 2022, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from MMs. Accordingly, CalEEMod Version 2022.1 has been used for Alternative 6 to determine operational air quality and GHG emissions as well as energy usage. Output from the model runs for operational activity are provided in Appendix 1.

The purpose of this work effort is to demonstrate whether Alternative 6 is anticipated to generate a significant air quality, greenhouse gas (GHG), or energy impact.

PROPOSED PROJECT

The proposed Project consists of two components: Air Cargo Center Component and the Off-Site Component. The footprint of the proposed Project would be approximately 45 acres. Of these 45 acres, approximately 33 acres would consist of the proposed development of a gateway air freight cargo center (Air Cargo Center Component), The rest of the proposed Project's 45-acre footprint would be an Off-Site Component consisting of approximately 12 acres within March Air Reserve Base (March ARB).

The Air Cargo Center Component of the Project includes the development of a gateway air freight cargo center, which consists of construction of a 180,800 square foot cargo building with 9 at-grade (ground level) loading doors, 31 dock-high door positions, and 37 trailer storage positions. The cargo building would contain approximately 9,000 square feet of office space. The cargo building would be constructed to a maximum height of 45-feet. The Project would also construct a tarmac and parking apron sized to accommodate commercial cargo airplanes, allowing for aircraft to access 4 proposed parking gates along the northern side of the cargo building (see Exhibit 1-B). The tarmac/parking apron would be paved to meet Federal Aviation Administration (FAA) standards. The construction of a new taxilane (Taxilane J) would provide aircraft access to the existing Taxiway A within March ARB. In addition, the existing Taxiway G is proposed to be expanded with the construction of a parking

apron adjacent to the western boundary of the cargo building, within the March JPA and would allow for aircraft to access 3 proposed aircraft parking gates along the western side of the cargo building. The proposed tarmac expansion, Taxilane J, and parking aprons would be sized to accommodate commercial cargo airplanes and would be paved to meet FAA standards. Parking aprons would connect with existing Taxiways A and G, which would be used by aircraft to access the March Inland Port Airport runway. Construction and development activities within the public right-of-way along Heacock Street would include construction of a 225-foot right-turn pocket into the project site along the southbound side of Heacock Street, and installation of a traffic signal at the existing access roadway (Access Road).

The Off-site Component of the Project would include construction of Project features on land owned by March ARB. Development occurring on March ARB would require easements from the United States Air Force within 5 work areas as identified below:

- **Work Area 1:** Construction of a 50-foot-wide perimeter patrol road running along the northern and northwestern boundaries of the Project site that would connect with the existing patrol road on the eastern and western ends of the constructed patrol road; replacement of an existing chain-link fence with a security fence.
- **Work Area 2:** Construction of a headwall and inlet apron for a storm drain culvert; extension of a dual 36-inch-diameter storm drain backbone via jack and bore under Taxiway A to replace the existing silt-filled culvert; connection of the culvert to the storm drain extension.
- **Work Area 3:** Reconfiguration of the Taxiway A to Taxilane J transition to allow for aircraft access to the proposed cargo building. Portions of Taxiway A would be demolished and reconstructed to allow for the taxiway to connect with the proposed Taxilane J within the proposed Project.
- **Work Area 4:** Removal of an existing inverted culvert apron outlet; cleaning of the existing 36-inch-diameter culvert; extension of the existing single 36-inch diameter storm drain under Taxiway A via jack and bore to connect the culvert.
- **Work Area 5:** Reconstruction and realignment of the intersection of Taxiway A and taxiway G. This would result in widened entryway for aircraft to turn from Taxiway A to Taxiway G, and to accommodate aircraft access to the aircraft parking stations along the western boundary of the cargo building.

ALTERNATIVE 6 – REDUCED AVIATION NOISE ALTERNATIVE

Under Alternative 6, the Reduced Aviation Noise Alternative, buildout of the project site would occur in an identical manner to the Proposed Project. Thus, Alternative 6 would result in the development of the Air Cargo Center Component and the Off-Site Component, as discussed previously. The cargo building and all proposed taxiway and aircraft parking apron improvements, utility improvements, landscaping, and internal driveways/parking lots, as well as the work within the right-of-way along Heacock Street, would be constructed in the exact same manner as the Proposed Project. In addition, all off-site work planned under the Proposed Project, including the work to be completed in Work Areas 1–5, would occur under this alternative.

The operational aspects of the cargo building would remain the same as those identified for the Proposed Project. However, under Alternative 6, annual flight operations would be reduced by approximately 30%, resulting in total annual operations of 7,488 flight operations. Flight operations would occur between 7:00 a.m. and 10:00 p.m. Alternative 6 restricts a higher percentage of flight operations to daytime hours (7:00 a.m. to 7:00 p.m.) than the Project. Additionally, under Alternative 6, no flight operations would occur between 10:00 p.m. and 11:00 p.m. (approximately

5% of the Proposed Project's flight operations). Alternative 6 forgoes the Proposed Project's non-peak/peak flight distribution. Alternative 6 is anticipated to have a maximum of 12 flights per day, 6 days a week. Operation of the air cargo center would similarly be reduced by approximately 30%.

Because the construction-related impacts for Alternative 6 would be the same as the Project's impacts, only operational impacts are analyzed here.

ALTERNATIVE 6 AIR QUALITY IMPACT ANALYSIS

CalEEMod utilizes summer and winter EMFAC2021 emission factors in order to derive vehicle emissions associated with Alternative 6 operational activities, which vary by season. In order to account for the reduction in operations that would occur under Alternative 6, the daily passenger vehicle and truck trips were assumed to be reduced by 29.4% compared to those of the proposed Project. Similarly, this reduction was applied to the ground equipment source and aircraft source emissions as well. Operational activities for summer and winter scenarios are presented in Table 1. Detailed operational model outputs are presented in Appendix 1.

As shown on Table 1, Alternative 6's daily regional emissions from operations would exceed the SCAQMD thresholds of significance for emissions of VOC, NO_X, and CO. Mitigation Measure (MM) AQ-3 through MM AQ-6, identified in the *Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis*, are required to reduce VOC, NO_X, and CO emissions. However, there is no way to meaningfully quantify these reductions in CalEEMod, and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of MM AQ-3 through MM AQ-6, Project operational-source emissions impacts would be significant and unavoidable. Additionally, it should be noted that the majority of emissions are aircraft related and there are no feasible mitigation measures that can be imposed by March JPA to reduce these emissions to less than significant levels.

TABLE 1: MAXIMUM DAILY REGIONAL OPERATIONAL EMISSIONS

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Summer						
Mobile Source	3.35	17.00	45.99	0.22	12.90	3.50
Area Source	5.95	0.07	7.86	0.00	0.01	0.01
Energy Source	0.05	0.93	0.78	0.01	0.07	0.07
Cargo Handling Equipment Source	0.16	0.53	23.22	0.00	0.04	0.04
Aircraft Source	113.75	392.99	516.51	29.28	4.08	4.07
Maximum Daily Emissions	123.26	411.51	594.36	29.52	17.11	7.68
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	YES	YES	YES	NO	NO	NO
Winter						
Mobile Source	3.20	17.89	37.91	0.22	12.90	3.50
Area Source	4.66	0.00	0.00	0.00	0.00	0.00
Energy Source	0.05	0.93	0.78	0.01	0.07	0.07
Cargo Handling Equipment Source	0.16	0.53	23.22	0.00	0.04	0.04
Aircraft Source	113.75	392.99	516.51	29.28	4.08	4.07
Maximum Daily Emissions	121.83	412.33	578.42	29.51	17.10	7.67
SCAQMD Regional Thresholds	55	55	550	150	150	55
Threshold Exceeded?	YES	YES	YES	NO	NO	NO

ALTERNATIVE 6 GHG ANALYSIS

IMPACTS WITHOUT MITIGATION

The annual GHG emissions associated with the operations of Alternative 6 are estimated to be 16,325.77 $MTCO_2e/yr$ as summarized in Table 2.

TABLE 2: GHG EMISSIONS – WITHOUT MITIGATION

Source	CO_2e Emissions (MT/yr)
Annual construction-related emissions amortized over 30 years	24.83
Mobile Source	3,920.52
Area Source	3.67
Energy Source	322.81
Water	103.72
Waste	52.95
Refrigerant Leakage	30.42
Cargo Handling Equipment Source	201.46
Aircraft	11,665.39
Alternative 6 Total CO_2e Emissions (All Sources)	16,325.77

IMPACTS WITH MITIGATION

MM GHG-7 from the *Meridian D-1 Gateway Aviation Center Greenhouse Gas Analysis* (GHGA) states that the Project will develop 6 charging stations. Credit for GHG emissions reductions after implementation of MM GHG-7 is presented in Table 3. It should be noted that emissions reductions from implementation of MM GHG-1 through MM GHG-6 and MM GHG-8 through MM GHG-12 are not readily quantifiable, therefore no numeric reduction in emissions has been taken.

After implementation of the quantified MMs, the annual GHG emissions associated with the operations of Alternative 6 are estimated to be 16,155.77 $MTCO_2e/yr$ as summarized in Table 3.

TABLE 3: GHG EMISSIONS – WITH MITIGATION

Source	CO_2e Emissions (MT/yr)
Annual construction-related emissions amortized over 30 years	24.83
Mobile Source	3,920.52
Area Source	3.67
Energy Source	322.81
Water	103.72
Waste	52.95
Refrigerant Leakage	30.42
Cargo Handling Equipment Source	201.46
Aircraft	11,665.39
Reductions from EV Charging Stations	*-170*
Alternative 6 Total CO_2e Emissions (All Sources)	16,155.77

ALTERNATIVE 6 ENERGY ANALYSIS

TRANSPORTATION ENERGY DEMANDS

The transportation energy demands for the operation of Alternative 6 are summarized on Table 4. As shown on Table 4, the operation of Alternative 6 will result in 6,206,197 annual VMT and an estimated annual fuel consumption of 1,642,059 gallons of fuel.

TABLE 4: TRAFFIC ANNUAL FUEL CONSUMPTION (ALL VEHICLES)

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	31.51	2,446,155	77,631
LDT1	24.62	198,289	8,054
LDT2	24.57	972,583	39,584
MDV	15.52	671,201	43,247
MCY	15.52	98,706	6,360
LHDT1	16.16	143,904	8,905
LHDT2	15.52	40,570	2,614
MHDT	8.47	619,641	73,157
HHDT	6.12	1,015,148	165,874
Aircraft	--	--	1,216,633
TOTAL (ALL VEHICLES)	--	6,206,197	1,642,059

FACILITY ENERGY DEMANDS

Annual natural gas and electricity demand for Alternative 6 are summarized in Table 5. Alternative 6 facility operational energy demands are estimated at 3,451,866 kBTU/year of natural gas; and 874,843 kWh/year of electricity.

TABLE 5: ALTERNATIVE 6 ANNUAL ENERGY DEMAND SUMMARY

Land Use	Natural Gas Demand	Electricity Demand[1]
Building Area	3,451,866	832,105
Parking Lot	0.00	42,738
Landscape	0.00	0
Other Asphalt Surfaces	0.00	0
TOTAL ALTERNATIVE 6 ENERGY DEMAND	3,451,866	874,843

[1]The electricity usage for the parking lot land use of the proposed Project was previously reported as 106,872 kWh. However, a bug in CalEEMod that resulted in an overestimation of electricity usage of parking lot electricity usage has since been corrected, and the correct model default electricity usage associated with the parking lot portion is 42,738 kWh.

APPENDIX 1:

CALEEMOD OPERATIONAL EMISSIONS OUTPUT

13445 Meridian D-1 Gateway Aviation Center Alternative 6 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	13445 Meridian D-1 Gateway Aviation Center Alternative 6
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.30

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.22	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—
User Defined Industrial	181	User Defined Unit	0.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

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.	10.1	9.35	18.0	54.6	0.23	0.35	12.6	13.0	0.33	3.25	3.58	172	25,766	25,937	18.1	2.60	261	27,426
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.55	7.91	18.8	38.7	0.22	0.34	12.6	13.0	0.32	3.25	3.57	172	25,040	25,212	18.1	2.62	186	26,631
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.49	8.78	19.1	45.5	0.22	0.34	12.6	12.9	0.33	3.23	3.56	172	25,161	25,333	18.1	2.62	218	26,785
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.73	1.60	3.48	8.30	0.04	0.06	2.29	2.36	0.06	0.59	0.65	28.4	4,166	4,194	3.00	0.43	36.0	4,435

2.5. Operations Emissions by Sector, Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.94	3.35	17.0	46.0	0.22	0.26	12.6	12.9	0.25	3.25	3.50	—	23,509	23,509	0.52	2.39	76.9	24,312
Area	6.06	5.95	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,942	1,942	0.18	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	10.1	9.35	18.0	54.6	0.23	0.35	12.6	13.0	0.33	3.25	3.58	172	25,766	25,937	18.1	2.60	261	27,426
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.79	3.20	17.9	37.9	0.22	0.26	12.6	12.9	0.25	3.25	3.50	—	22,816	22,816	0.53	2.41	2.00	23,549
Area	4.66	4.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,942	1,942	0.18	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	8.55	7.91	18.8	38.7	0.22	0.34	12.6	13.0	0.32	3.25	3.57	172	25,040	25,212	18.1	2.62	186	26,631
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.78	3.19	18.1	39.3	0.22	0.26	12.6	12.8	0.25	3.23	3.48	—	22,914	22,914	0.53	2.41	33.2	23,680
Area	5.61	5.54	0.05	5.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,942	1,942	0.18	0.01	—	1,950
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	9.49	8.78	19.1	45.5	0.22	0.34	12.6	12.9	0.33	3.23	3.56	172	25,161	25,333	18.1	2.62	218	26,785
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.69	0.58	3.31	7.18	0.04	0.05	2.29	2.34	0.05	0.59	0.64	—	3,794	3,794	0.09	0.40	5.50	3,921
Area	1.02	1.01	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Energy	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	322	322	0.03	< 0.005	—	323
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Waste	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	1.73	1.60	3.48	8.30	0.04	0.06	2.29	2.36	0.06	0.59	0.65	28.4	4,166	4,194	3.00	0.43	36.0	4,435

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.35	3.02	2.09	42.0	0.09	0.04	8.37	8.41	0.04	2.11	2.15	—	8,967	8,967	0.29	0.21	35.6	9,072
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 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
User Defined Industrial	0.59	0.33	14.9	4.02	0.14	0.23	4.27	4.49	0.22	1.14	1.35	—	14,542	14,542	0.23	2.18	41.3	15,240
Total	3.94	3.35	17.0	46.0	0.22	0.26	12.6	12.9	0.25	3.25	3.50	—	23,509	23,509	0.52	2.39	76.9	24,312

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	3.21	2.89	2.32	33.9	0.08	0.04	8.37	8.41	0.04	2.11	2.15	—	8,269	8,269	0.30	0.22	0.92	8,344
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 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
User Defined Industrial	0.58	0.32	15.6	4.05	0.14	0.23	4.27	4.49	0.22	1.14	1.35	—	14,546	14,546	0.23	2.19	1.07	15,204
Total	3.79	3.20	17.9	37.9	0.22	0.26	12.6	12.9	0.25	3.25	3.50	—	22,816	22,816	0.53	2.41	2.00	23,549
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.58	0.52	0.44	6.44	0.02	0.01	1.52	1.52	0.01	0.38	0.39	—	1,386	1,386	0.05	0.04	2.55	1,401
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 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
User Defined Industrial	0.11	0.06	2.87	0.73	0.02	0.04	0.77	0.82	0.04	0.21	0.25	—	2,408	2,408	0.04	0.36	2.95	2,520
Total	0.69	0.58	3.31	7.18	0.04	0.05	2.29	2.34	0.05	0.59	0.64	—	3,794	3,794	0.09	0.40	5.50	3,921

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	40.8	40.8	< 0.005	< 0.005	—	41.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	836	836	0.08	0.01	—	840
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	40.8	40.8	< 0.005	< 0.005	—	41.1
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	836	836	0.08	0.01	—	840

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	6.76	6.76	< 0.005	< 0.005	—	6.80
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	138	138	0.01	< 0.005	—	139

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
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 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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
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 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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184
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 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
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.04	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.62	0.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.29	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Total	6.06	5.95	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	4.04	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.62	0.62	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	4.66	4.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.74	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Total	1.02	1.01	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Wareho Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

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
Unrefrigerated Warehouse-No Rail	706	706	706	257,699	12,019	12,019	12,019	4,386,935
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	195	195	195	71,205	4,984	4,984	4,984	1,819,262

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	271,200	90,400	127,574

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

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)
Unrefrigerated Warehouse-No Rail	832,105	349	0.0330	0.0040	3,451,866
Parking Lot	42,738	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	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)
Unrefrigerated Warehouse-No Rail	41,810,000	2,118,719
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	170	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
User Defined Industrial	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat

Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0

Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Median HI	—
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458

Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9

Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9

Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis. It should be noted that the use of a 2024 opening year is conservative as it is assumed that the vehicle fleet becomes cleaner each year as older vehicles are replaced with newer, cleaner ones.
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.