Appendix C – Air Quality and Greenhouse Gas Emissions Supporting Documentation

Contains:

- CalEEMod Data and Assumptions

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House Family Vineyards - Emissions Modeling Inputs - Baseline Scenario 1

Project Characteristics	Input	Notes
Project Name	House Family Vineyards Baseline 1	
Project Location	Santa Clara County	Zip Code: 95070
Climate Zone	4	
Land Use Setting	Urban	
Construction Start Date	2/3/2025	
Operational Year	2026	
Utility	PG&E	

acre	sq ft
1	43560

Land Use

Project Component	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Square Feet	Acreage	Landscaped Area (sq ft)	Notes
Tasting Deck	Recreational	Quality Restaurant	1,200	0.03	26373	
Fire Access Road	Parking	Other Non-Asphalt Surfaces	2,434	0.06		
Wine Cave	Recreational	User Defined Recreational	2,600	0.060		
Secondary Access Road	Parking	Other Non-Asphalt Surfaces	19,800	0.45		from 12/6 email House Family Vineyards Follow-Up (Secondary Access Road Details) Revised Plan
Parking Stalls	Parking	Other Non-Asphalt Surfaces	9625	0.22		

1. For wine cave - no HVAC system so add in lighting assumptions from another land use (restaurant) in operational inputs.
2. Parking stalls calculated based on project plans. For ADA spaces, assumes 8x18ft standard ADA space, 11x18ft van ADA space, and 5x18ft access space between them.

Construction Phases and Equipment	Start Date	End Date
7 months		
Construction Work Days	5 days/week	

Construction Equipment

Project Component	Project Activity	CalEEMod Phase	Duration (days)	Construction Start Date	Construction End Date	Equipment	Quantity	Hours per Day	HP
Tasting Deck Modifications	Construction	Building Construction	32	2/3/2025	3/18/2025	Generator Set	1	8	default
	Grading	Grading	6	2/12/2025	2/19/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Fire Access Road	Scarify and Recompact	Site Preparation	7	4/11/2025	4/21/2025	Off-Highway Trucks	1	8	376
						Skid Steer Loaders	1	8	71
						Forklifts	1	8	82
	Rough Grading Import/Place Rock Finish Grade Rock Proof Roll and Complete	Grading	29	4/22/2025	5/30/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Secondary Access Road	Scarify and Recompact	Site Preparation	10	6/2/2025	6/13/2025	Off-Highway Trucks	1	8	376
						Skid Steer Loaders	1	8	71
						Forklifts	1	8	82
	Rough Grading Import/Place Rock Finish Grade Rock Proof Roll and Complete	Grading	43	6/16/2025	8/13/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Wine Cave	Excavation Cut to Fill OSHA Slope Cut Cut to Stockpile Foundation Excavation	Grading	25	3/19/2025	4/22/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
	Foundation form Wall back form and reinforce Front form and pour Deck shoring and form Deck embeds and placement Pull shores Interior MPE Doors Backfill OSHA Cut and top Grading	Building Construction	69	4/23/2025	7/28/2025	Forklifts	2	8	default
						Tractors/Loaders/Backhoes	2	8	default
						Cement and Mortar Mixers	1	8	default
	Punch	Architectural Coating	10	7/21/2025	8/1/2025	Air Compressors	1	8	default

Notes:
1. All diesel equipment
2. Equipment HP based on anticipated equipment type provided by HFV
3. Secondary access road duration of 53 days includes overlapping 10 days for Finish Grade Rock and Proof Roll and Complete activites.

Construction Earthwork Quantities

Project Component	Cut (cy)	Fill (cy)
Tasting Deck	0	132
Fire Access Road	403	483
Secondary Access Road	1411	349
Wine Cave	1411	0
Onsite Quarry	0	2261
Total	3225	3225

Excess Cut Exported (cy)	0

Notes:
1. Onsite quarry fill is excess native soil that is cut from construction of wine cave and access roads.

CalEEMod Material Import/Export

Project Component	CalEEMod Phase	Import (cy)	Export (cy)	Onsite Quarry Fill (cy)
Tasting Deck	Tasting Deck Mod - Grading	132	0	0
Fire Access Road	Fire Access Road - Site Preparation	0	403	0
	Fire Access Road - Grading	483	0	0
Secondary Access Road	Secondary Access Road - Site Preparation	0	1411	0
	Secondary Access Road - Grading	349	0	0
Wine Cave	Wine Cave - Grading	0	1411	2261

Notes:
1. Import and export quantities represent material movement onsite (cut and fill). Materials will be reused onsite. Only exported material is excess 195 cy from Secondary Access Road.
2. Assume Quarry Fill will come from wine cave excavation for determining onsite truck travel for material movement.

Construction Trips and VMT

		Worker Trips	Vendor (Concrete/Rock) Truck Trips		Onsite Material Movement			
Project Component	CalEEMod Phase	trips/day	Total Trucks	Truck Trips/Day	Total Material (cy)	Total Trucks	Truck Trips/Day	Distance (mi)
Tasting Deck Modifications	Building Construction	8	2	2	-	-	-	-
	Grading		-	-	-	-	-	-
Fire Access Road	Site Preparation	12	-	-	-	-	-	-
	Grading		42	3	-	-	-	-
Secondary Access Road	Site Preparation	12	-	-	-	-	-	-
	Grading		27	2	-	-	-	-
Wine Cave	Grading	12	7	2	2261	142	12	0.4
	Building Construction		30	2	-	-	-	-
	Architectural Coating		-	-	-	-	-	-

Notes:
1. Trips per day includes one trip and one trip out.
2. Total material import trips per day and onsite material movement trips per day assume total respective trucks are divided over the phase duration, then rounded up to the nearest whole number. If the result of this is 1, it is rounded up to 2 to account for one truck trip in and one trip out.
3. Onsite material movement truck capacity assumed to be 16 cy.
4. Onsite material movement trip distance measured on Google Earth from furthest point of respective project feature along road to onsite quarry location.

cy = cubic yards

Operational Vehicle Trips and Miles Traveled

	Project Average Daily Trips	Baseline Average Daily Trips	Net Project Average Daily Trips	Daily VMT	Annual Net Project Trips	Annual VMT
Total Operational Trips	127	58	69	1269.6	25185	464006.25

Notes:
1. Project average daily trips from Traffic Study (Fehr & Peers 2024).
2. Baseline average daily trips calculated based on 71 average daily visitors under Baseline 1 and average vehicle occupancy of 2.5. Also accounts for 2 trips per vehicle.
3. Baseline trips subtracted from the project to determine net project trips do not include existing employee trips.
4. Assumes average VMT (18.4 VMT/trip) of wine club members calculated based on distance from winery to city associated with zip code.

Operational Energy Use

Project Component	Energy (kWH/year)	Water (gal)	Solid Waste (tons)	Notes
Tasting Deck	7800	75000	7.8	
Wine Cave	*included above*			
Fire Access Road	-		-	
Secondary Access Road	-		-	
Parking Stalls	-	-	-	

Notes:
1. Energy and water consumption provided by HFV on January 17, 2022. "\\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\DCS\Projects_ENV\60673074_House_Family_Vineyard\400_Technical\410_Background Information\2022 Data Requests and Responses from Applicant\HFV AECOM EIR question response.docx"
2. Solid waste based on 6 yards of recycling/garbage per week and 50 lb/cy. Applicant-provided data was higher than CalEEMod default for quality restaurant (tasting deck).

House Family Vineyards - Construction Emission Outputs by Phase - Baseline Scenario 1

Phase	Year	Category	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO_2	CH_4	N_2O	R	CO_2e
			tons										MT				
Fire Access Road - Site Preparation	2025	Off-Road Equipment	2.06E-03	1.52E-02	1.93E-02	5.59E-05	5.67E-04		5.67E-04	5.22E-04		5.22E-04	5.49	2.23E-04	4.45E-05		5.51E+00
Fire Access Road - Site Preparation	2025	Dust from Material Movement						1.17E-05	1.17E-05		1.78E-06	1.78E-06					
Fire Access Road - Site Preparation	2025	Worker	1.33E-04	1.15E-04	1.45E-03	0.00E+00	0.00E+00	3.41E-04	3.41E-04	0.00E+00	8.00E-05	8.00E-05	0.31	6.72E-06	1.23E-05	5.57E-04	3.10E-01
Secondary Access Road - Site Preparation	2025	Off-Road Equipment	2.95E-03	2.17E-02	2.75E-02	7.99E-05	8.11E-04		8.11E-04	7.46E-04		7.46E-04	7.84	3.18E-04	6.36E-05		7.87E+00
Secondary Access Road - Site Preparation	2025	Dust from Material Movement						4.11E-05	4.11E-05		6.23E-06	6.23E-06					
Secondary Access Road - Site Preparation	2025	Worker	1.90E-04	1.65E-04	2.07E-03	0.00E+00	0.00E+00	4.88E-04	4.88E-04	0.00E+00	1.14E-04	1.14E-04	0.44	9.60E-06	1.76E-05	7.95E-04	4.43E-01
Tasting Deck Mod - Grading	2025	Off-Road Equipment	1.26E-03	1.12E-02	1.76E-02	3.91E-05	4.41E-04		4.41E-04	4.06E-04		4.06E-04	3.84	1.56E-04	3.11E-05		3.85E+00
Tasting Deck Mod - Grading	2025	Dust from Material Movement						3.85E-06	3.85E-06		5.82E-07	5.82E-07					
Tasting Deck Mod - Grading	2025	Worker	7.59E-05	6.59E-05	8.29E-04	0.00E+00	0.00E+00	1.95E-04	1.95E-04	0.00E+00	4.57E-05	4.57E-05	0.17	3.84E-06	7.06E-06	3.18E-04	1.77E-01
Fire Access Road - Grading	2025	Off-Road Equipment	6.11E-03	5.43E-02	8.49E-02	1.89E-04	2.13E-03		2.13E-03	1.96E-03		1.96E-03	18.55	7.52E-04	1.50E-04		1.86E+01
Fire Access Road - Grading	2025	Dust from Material Movement						1.41E-05	1.41E-05		2.13E-06	2.13E-06					
Fire Access Road - Grading	2025	Worker	5.50E-04	4.78E-04	6.01E-03	0.00E+00	0.00E+00	1.41E-03	1.41E-03	0.00E+00	3.31E-04	3.31E-04	1.27	2.78E-05	5.12E-05	2.31E-03	1.29E+00
Fire Access Road - Grading	2025	Vendor	4.24E-05	1.56E-03	7.37E-04	8.06E-06	1.61E-05	3.02E-04	3.18E-04	1.61E-05	8.36E-05	9.97E-05	1.06	5.86E-05	1.53E-04	1.22E-03	1.11E+00
Secondary Access Road - Grading	2025	Off-Road Equipment	9.06E-03	8.05E-02	1.26E-01	2.80E-04	3.16E-03		3.16E-03	2.91E-03		2.91E-03	27.50	1.12E-03	2.23E-04		2.76E+01
Secondary Access Road - Grading	2025	Dust from Material Movement						1.02E-05	1.02E-05		1.54E-06	1.54E-06					
Secondary Access Road - Grading	2025	Worker	8.16E-04	7.09E-04	8.91E-03	0.00E+00	0.00E+00	2.10E-03	2.10E-03	0.00E+00	4.91E-04	4.91E-04	1.88	4.13E-05	7.59E-05	3.42E-03	1.91E+00
Secondary Access Road - Grading	2025	Vendor	4.19E-05	1.54E-03	7.28E-04	7.96E-06	1.59E-05	2.99E-04	3.15E-04	1.59E-05	8.27E-05	9.86E-05	1.05	5.80E-05	1.51E-04	1.21E-03	1.10E+00
Wine Cave - Grading	2025	Off-Road Equipment	5.27E-03	4.68E-02	7.32E-02	1.63E-04	1.84E-03		1.84E-03	1.69E-03		1.69E-03	15.99	6.49E-04	1.30E-04		1.60E+01
Wine Cave - Grading	2025	Dust from Material Movement						4.11E-05	4.11E-05		6.23E-06	6.23E-06					
Wine Cave - Grading	2025	Onsite Truck	9.52E-05	2.39E-03	1.66E-03	4.63E-06	3.97E-06	8.21E-02	8.21E-02	2.65E-06	8.20E-03	8.20E-03	0.42	1.10E-04	6.60E-05	1.84E-04	4.40E-01
Wine Cave - Grading	2025	Worker	4.74E-04	4.12E-04	5.18E-03	0.00E+00	0.00E+00	1.22E-03	1.22E-03	0.00E+00	2.86E-04	2.86E-04	1.09	2.40E-05	4.41E-05	1.99E-03	1.11E+00
Wine Cave - Grading	2025	Vendor	2.44E-05	8.94E-04	4.23E-04	4.63E-06	9.26E-06	1.74E-04	1.83E-04	9.26E-06	4.81E-05	5.73E-05	0.61	3.37E-05	8.80E-05	7.03E-04	6.40E-01
Tasting Deck Mod - Construction	2025	Off-Road Equipment	1.59E-03	1.27E-02	8.39E-03	2.32E-05	5.17E-04		5.17E-04	4.76E-04		4.76E-04	1.51	6.11E-05	1.22E-05		1.51E+00
Tasting Deck Mod - Construction	2025	Worker	4.05E-04	3.52E-04	4.42E-03	0.00E+00	0.00E+00	1.04E-03	1.04E-03	0.00E+00	2.44E-04	2.44E-04	0.93	2.05E-05	3.76E-05	1.70E-03	9.45E-01
Tasting Deck Mod - Construction	2025	Vendor	3.12E-05	1.14E-03	5.42E-04	5.93E-06	1.19E-05	2.22E-04	2.34E-04	1.19E-05	6.15E-05	7.34E-05	0.78	4.31E-05	1.13E-04	8.99E-04	8.19E-01
Wine Cave - Construction	2025	Off-Road Equipment	1.47E-02	1.41E-01	2.15E-01	3.11E-04	6.18E-03		6.18E-03	5.68E-03		5.68E-03	29.49	1.20E-03	2.39E-04		2.96E+01
Wine Cave - Construction	2025	Worker	1.31E-03	1.14E-03	1.43E-02	0.00E+00	0.00E+00	3.37E-03	3.37E-03	0.00E+00	7.88E-04	7.88E-04	3.01	6.62E-05	1.22E-04	5.49E-03	3.06E+00
Wine Cave - Construction	2025	Vendor	6.72E-05	2.47E-03	1.17E-03	1.28E-05	2.56E-05	4.79E-04	5.05E-04	2.56E-05	1.33E-04	1.58E-04	1.69	9.30E-05	2.43E-04	1.94E-03	1.77E+00
Wine Cave - Architectural Coating	2025	Off-Road Equipment	8.53E-04	5.88E-03	7.60E-03	1.15E-05	1.83E-04		1.83E-04	1.68E-04		1.68E-04	0.81	3.28E-05	6.55E-06		8.10E-01
Wine Cave - Architectural Coating	2025	Architectural Coating	2.43E-02														
Wine Cave - Architectural Coating	2025	Worker	1.90E-04	1.65E-04	2.07E-03	0.00E+00	0.00E+00	4.88E-04	4.88E-04	0.00E+00	1.14E-04	1.14E-04	0.44	9.60E-06	1.76E-05	7.95E-04	4.43E-01

Emissions Summary (2025)	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
Tons	0.07	0.40	0.63	0.00	0.02	0.09	0.11	0.01	0.01	0.03
Pounds	145.06	806.23	1259.11	2.39	31.82	188.76	220.58	29.29	22.24	51.53

Daily Average Emissions (lbs/day)	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
2025	1.05	5.84	9.12	0.02	0.23	1.37	1.60	0.21	0.16	0.37

Total Construction Days

Year	Days
2025	138

(CalEEMod output 5.1)

House Family Vineyards - Operational Criteria Air Pollutant and GHG Outputs - Baseline 1

	ROG	NOx	PM10T	PM2.5T	CO_2e
Source	tons/year				MT/yr
Mobile	0.05	0.06	0.16	0.04	152.02
Area	0.02	0.00	0.00	0.00	0.06
Energy	0.00	0.00	0.00	0.00	0.73
Water	0.00	0.00	0.00	0.00	0.28
Waste	0.00	0.00	0.00	0.00	2.43
Refrig.	0.00	0.00	0.00	0.00	0.31
Total	0.07	0.06	0.16	0.04	155.83

	ROG	NOx	PM10T	PM2.5T
Source	lb/day			
Average Daily Emissions	0.37	0.33	0.89	0.23
Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No

Notes:

1. Number of operational days per year = 365

Total Greenhouse Gas Emissions

Year	Year	MT CO2e
Construction	2025	126.95
Operation	2026	155.83
Total GHG Emissions		282.77

House Family Vineyards - Operational Transportation Energy - Baseline Scenario 1

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

										1000 gal/yr	gal/yr/mile			
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	% VMT	Fuel Consumption	Fuel Consumption/Mile	EVMT	Energy Consumption	Energy Consumption / Mile
Santa Clara	2026	HHDT	Aggregate	Aggregate	Gasoline	1.890207523	43737.92788	43737.92788	0.00%	10.3940766	0.237644468	0	0	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Diesel	8867.794797	316995672.7	316995672.7	1.94%	52557.12091	0.165797597	0	0	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Electricity	110.5302099	3599175.361	0	0.02%	0	0	3599175.361	6635932.828	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Natural Gas	863.460788	17670241.42	17670241.42	0.11%	3431.871232	0.194217563	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Gasoline	598869.7901	7644918698	7644918698	46.68%	242520.0424	0.031723037	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Diesel	1478.944391	14724709.41	14724709.41	0.09%	329.2932522	0.022363311	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Electricity	64495.23744	950677794.2	0	5.80%	0	0	950677794.2	367040092.3	0.386082534
Santa Clara	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	20380.43428	300645704.8	143136402.1	1.84%	4858.741007	0.033944831	157509302.6	47572503.93	0.302029805
Santa Clara	2026	LDT1	Aggregate	Aggregate	Gasoline	50750.46627	564208285.3	564208285.3	3.44%	21463.00553	0.038040926	0	0	
Santa Clara	2026	LDT1	Aggregate	Aggregate	Diesel	18.47770915	89025.87049	89025.87049	0.00%	3.629144172	0.040765051	0	0	
Santa Clara	2026	LDT1	Aggregate	Aggregate	Electricity	263.5822489	3688221.653	0	0.02%	0	0	3688221.653	1423957.964	0.386082534
Santa Clara	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	130.6818866	2046634.317	873069.93	0.01%	29.7978701	0.034129897	1173564.387	354451.4226	0.302029805
Santa Clara	2026	LDT2	Aggregate	Aggregate	Gasoline	296178.924	3664765827	3664765827	22.37%	142902.5538	0.038993638	0	0	
Santa Clara	2026	LDT2	Aggregate	Aggregate	Diesel	1079.589347	13602449.41	13602449.41	0.08%	395.1539942	0.029050209	0	0	
Santa Clara	2026	LDT2	Aggregate	Aggregate	Electricity	2705.078634	31470547.24	0	0.19%	0	0	31470547.24	12150228.64	0.386082534
Santa Clara	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2986.35294	44380006	19885975.39	0.27%	681.7792576	0.034284426	24494030.61	7397927.284	0.302029805
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Gasoline	19567.3461	240100698.9	240100698.9	1.47%	23857.34901	0.09936393	0	0	
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Diesel	10635.30661	136234509.7	136234509.7	0.83%	8431.212649	0.061887496	0	0	
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Electricity	378.0593133	7839684.779	0	0.05%	0	0	7839684.779	5134294.1	0.654910783
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Gasoline	2513.651385	29813906.2	29813906.2	0.18%	3343.254758	0.112137428	0	0	
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Diesel	4995.257652	63143935.63	63143935.63	0.39%	4663.229566	0.073850791	0	0	
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Electricity	96.38373049	1903815.045	0	0.01%	0	0	1903815.045	1228079.418	0.645062356
Santa Clara	2026	MCY	Aggregate	Aggregate	Gasoline	28797.04023	57981091.18	57981091.18	0.35%	1366.822706	0.023573594	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Gasoline	162557.8711	1954069132	1954069132	11.93%	92406.88656	0.047289466	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Diesel	2430.298577	29186704.41	29186704.41	0.18%	1129.959739	0.038714879	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Electricity	2850.956241	33262847.38	0	0.20%	0	0	33262847.38	12842204.42	0.386082534
Santa Clara	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	1813.351494	25878469.78	11698847.91	0.16%	406.8376847	0.034775876	14179621.87	4282668.426	0.302029805
Santa Clara	2026	MH	Aggregate	Aggregate	Gasoline	2263.186255	6902439.04	6902439.04	0.04%	1562.092978	0.22631029	0	0	
Santa Clara	2026	MH	Aggregate	Aggregate	Diesel	1010.773548	3177922.415	3177922.415	0.02%	338.8524255	0.106627029	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Gasoline	1410.725867	23697246.03	23697246.03	0.14%	4833.305056	0.203960623	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Diesel	10675.11434	135862074.7	135862074.7	0.83%	15908.52784	0.11709322	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Electricity	167.5841413	2779164.5	0	0.02%	0	0	2779164.5	3044223.016	1.095373453
Santa Clara	2026	MHDT	Aggregate	Aggregate	Natural Gas	107.6314115	1529352.549	1529352.549	0.01%	212.3133025	0.138825611	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Gasoline	419.1997068	5939010.543	5939010.543	0.04%	1206.646049	0.203172909	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Diesel	949.0451881	18300948.27	18300948.27	0.11%	2285.244006	0.124870251	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Electricity	4.484159388	119285.7179	0	0.00%	0	0	119285.7179	132150.3238	1.107846992
Santa Clara	2026	OBUS	Aggregate	Aggregate	Natural Gas	9.101243919	175193.8983	175193.8983	0.00%	22.16571281	0.126521032	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Gasoline	183.7933038	2960838.069	2960838.069	0.02%	295.688902	0.099866624	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Diesel	674.9981098	4973962.315	4973962.315	0.03%	604.1911821	0.1214708	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Electricity	7.587222005	79866.31526	0	0.00%	0	0	79866.31526	84135.61628	1.05345559
Santa Clara	2026	SBUS	Aggregate	Aggregate	Natural Gas	26.1646758	210114.588	210114.588	0.00%	37.73587541	0.179596647	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Gasoline	46.35522027	1582962.783	1582962.783	0.01%	170.5751915	0.107756918	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Diesel	396.7700483	14415481.73	14415481.73	0.09%	1576.102377	0.109334007	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Electricity	28.6595887	979547.4562	0	0.01%	0	0	979547.4562	1707590.342	1.743244119
Santa Clara	2026	UBUS	Aggregate	Aggregate	Natural Gas	62.84534982	2373101.868	2373101.868	0.01%	399.3950291	0.168300836	0	0	
									100.00%					

Total Annual Project VMT: 464,006

% VMT by Fuel:	
Diesel	5%
Gasoline	87%
Natural Gas	0%
Electricity	6%
Plug-In Hybrid	2%
Total	100%

Weighted Average Fuel Consumption:		Unit
Diesel	0.11751918	gal/mi
Gasoline	0.03775017	gal/mi
Natural Gas	0.18687860	gal/mi
Electricity	0.39057022	kWh/mi
Plug-In Hybrid	0.03404392	gal/mi
Plug-In Hybrid	0.30202980	kWh/mi

Fuel/Energy Use by Type		Unit
Diesel	2,499	gal/year
Gasoline	15,183	gal/year
Natural Gas	116	gal/year
Electricity	14,658	kWh/year
Plug-In Hybrid	360	gal/year

*Note that natural gas consumption is negligible and not accounted for in summary tab. Plug-in Hybrid is summed with Gasoline in Summary Tab.
Total Annual Project VMT is based on anticipated post-project annual average daily trips.

Note that grey highlighted columns indicated calculations using EMFAC data, not data output from EMFAC.

House Family Vineyards - Emissions Modeling Inputs - Baseline Scenario 2

Project Characteristics	Input	Notes
Project Name	House Family Vineyards Baseline 2	
Project Location	Santa Clara County	Zip Code: 95070
Climate Zone	4	
Land Use Setting	Urban	
Construction Start Date	2/4/2013	
Operational Year	2026	
Utility	PG&E	

acre	sq ft
1	43560

Land Use

Project Component	CalEEMod Land Use Type	CalEEMod Land Use Subtype	Square Feet	Acreage	Landscaped Area (sq ft)	Notes
Tasting Deck	Recreational	Quality Restaurant	1,200	0.03	26373	
Fire Access Road	Parking	Other Non-Asphalt Surfaces	2,434	0.06		
Wine Cave	Recreational	User Defined Recreational?	2,600	0.06		
Secondary Access Road	Parking	Other Non-Asphalt Surfaces	19,800	0.45		from 12/6 email House Family Vineyards Follow-Up (Secondary Access Road Details) Revised Plan
Parking Stalls	Parking	Other Non-Asphalt Surfaces	9625	0.22		

1. For wine cave - no HVAC system so add in lighting assumptions from another land use (restaurant) in operational inputs.
2. Parking stalls calculated based on project plans. For ADA spaces, assumes 8x18ft standard ADA space, 11x18ft van ADA space, and 5x18ft access space between them.

Construction Phases and Equipment	Start Date	End Date
7 months		
Construction Work Days	5 days/week	

Construction Equipment

Project Component	Project Activity	CalEEMod Phase	Duration (days)	Construction Start Date	Construction End Date	Equipment	Quantity	Hours per Day	HP
Tasting Deck Construction	Mobilization and Site Preparation	Site Preparation	4	2/4/2013	2/7/2013	Skid Steer Loaders	2	8	default
	Drill for Piers	Grading	5	2/8/2013	2/14/2013	Bore/Drill Rig	1	8	default
	Framing, Railing, Electr, Light, Deliver/I	Construction	37	2/15/2013	4/8/2013	Tractors/Loaders/Backhoes	1	8	default
	Paint and Stain	Architectural Coating	5	3/29/2013	4/4/2013	Air Compressors	1	8	default
Tasting Deck Modifications	Construction	Building Construction	32	2/3/2025	3/18/2025	Generator Set	1	8	default
	Grading	Grading	6	2/12/2025	2/19/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Fire Access Road	Scarify and Recompact	Site Preparation	7	4/11/2025	4/21/2025	Off-Highway Trucks	1	8	376
						Skid Steer Loaders	1	8	71
						Forklifts	1	8	82
	Rough Grading Import/Place Rock Finish Grade Rock Proof Roll and Complete	Grading	29	4/22/2025	5/30/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Secondary Access Road	Scarify and Recompact	Site Preparation	10	6/2/2025	6/13/2025	Off-Highway Trucks	1	8	376
						Skid Steer Loaders	1	8	71
						Forklifts	1	8	82
	Rough Grading Import/Place Rock Finish Grade Rock Proof Roll and Complete	Grading	43	6/16/2025	8/13/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
Wine Cave	Excavation Cut to Fill OSHA Slope Cut Cut to Stockpile Foundation Excavation	Grading	25	3/19/2025	4/22/2025	Excavators	1	8	133
						Skid Steer Loaders	1	8	71
						Tractors/Loaders/Backhoes	1	8	202
	Foundation form Wall back form and reinforce Front form and pour Deck shoring and form Deck embeds and placement Pull shores Interior MPE Doors Backfill OSHA Cut and top Grading	Building Construction	69	4/23/2025	7/28/2025	Forklifts	2	8	default
						Tractors/Loaders/Backhoes	2	8	default
						Cement and Mortar Mixers	1	8	default
	Punch	Architectural Coating	10	7/21/2025	8/1/2025	Air Compressors	1	8	default

Notes:
1. All diesel equipment
2. Equipment HP based on anticipated equipment type provided by HFV

Construction Earthwork Quantities

Project Component	Cut (cy)	Fill (cy)
Tasting Deck	0	132
Fire Access Road	403	483
Secondary Access Road	1411	349
Wine Cave	1411	0
Onsite Quarry	0	2261
Total	3225	3225

Excess Cut Exported (cy)	0

Notes:

1. Onsite quarry fill is excess native soil that is cut from construction of wine cave and access roads.

CalEEMod Material Import/Export

Project Component	CalEEMod Phase	Import (cy)	Export (cy)	Onsite Quarry Fill (cy)
Tasting Deck Construction	Tasting Deck Construction -Site Prepar	0	0	0
	Tasting Deck Construction -Grading	0	0	0
Tasting Deck Modification	Tasting Deck Mod - Grading	132	0	0
Fire Access Road	Fire Access Road - Site Preparation	0	403	0
	Fire Access Road - Grading	483	0	0
Secondary Access Road	Secondary Access Road - Site Preparati	0	1411	0
	Secondary Access Road - Grading	349	0	0
Wine Cave	Wine Cave - Grading	0	1411	2261

Notes:

1. Import and export quantities represent material movement onsite (cut and fill). Materials will be reused onsite. Only exported material is excess 195 cy from Secondary Access Road.
2. Assume Quarry Fill will come from wine cave excavation for determining onsite truck travel for material movement.

Construction Trips and VMT

		Worker Trips	Vendor (Concrete/Rock) Truck Trips		Onsite Material Movement			
Project Component	CalEEMod Phase	trips/day	Total Trucks	Truck Trips/Day	Total Material (cy)	Total Trucks	Truck Trips/Day	Distance (mi)
Tasting Deck Construction	Site Preparation	8	-	-	-	-	-	-
	Grading		-	-	-	-	-	-
	Building Construction		12	2	-	-	-	-
	Architectural Coating		-	-	-	-	-	-
Tasting Deck Modifications	Building Construction	8	2	2	-	-	-	-
	Grading		-	-	-	-	-	-
Fire Access Road	Site Preparation	12	-	-	-	-	-	-
	Grading		42	3	-	-	-	-
Secondary Access Road	Site Preparation	12	-	-	-	-	-	-
	Grading		27	2	-	-	-	-
Wine Cave	Grading	12	7	2	2261	142	12	0.4
	Building Construction		30	2	-	-	-	-
	Architectural Coating		-	-	-	-	-	-

Notes:

1. Trips per day includes one trip and one trip out.
2. Total material import trips per day and onsite material movement trips per day assume total respective trucks are divided over the phase duration, then rounded up to the nearest whole number. If the result of this is 1, it is rounded up to 2 to account for one truck trip in and one trip out.
3. Onsite material movement truck capacity assumed to be 16 cy.
4. Onsite material movement trip distance measured on Google Earth from furthest point of respective project feature along road to onsite quarry location.

cy = cubic yards

Operational Vehicle Trips and Miles Traveled

	Project Average Daily Trips	Baseline Average Daily Trips	Net Project Average Daily Trips	Daily VMT	Annual Net Project Trips	Annual VMT
Total Operational Trips	127	8	119	2189.6	43,435.0	800,242.7

Notes:

1. Project average daily trips from Traffic Study (Fehr & Peers 2024).
2. Baseline average daily trips calculated based on 10 average daily visitors under Baseline 2 and average vehicle occupancy of 2.5. Also accounts for 2 trips per vehicle.
3. Baseline trips subtracted from the project to determine net project trips do not include existing employee trips.
4. Assumes average VMT (18.4 VMT/trip) of wine club members calculated based on distance from winery to city associated with zip code.

Operational Energy Use

Project Component	Energy (kWH/year)	Water (gal)	Solid Waste (tons)	Notes
Tasting Deck	7800	75000	7.8	
Wine Cave	*included above*			
Fire Access Road	-		-	
Secondary Access Road	-		-	
Parking Stalls	-	-	-	

Notes:

1. Energy and water consumption provided by HFV on January 17, 2022. "\\na.aecomnet.com\lfs\AMER\Oakland-USOAK01\DCS\Projects_ENV\60673074_House_Family_Vineyard\400_Technical\410_Background Information\2022 Data Requests and Responses from Applicant\HFV AECOM EIR question response.docx"
2. Solid waste based on 6 yards of recycling/garbage per week and 50 lb/cy. Applicant-provided data was higher than CalEEMod default for quality restaurant (tasting deck).

House Family Vineyards - Construction Emission Outputs by Phase - Baseline Scenario 2

Phase	Year	Category	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO_2	CH_4	N_2O	R	CO_2e
			tons										MT				
Tasting Deck - Site Preparation	2013	Off-Road Equipment	6.55E-04	8.43E-03	6.23E-03	9.03E-06	5.13E-04		5.13E-04	4.72E-04		4.72E-04	0.89	3.60E-05	7.20E-06		8.91E-01
Tasting Deck - Site Preparation	2013	Worker	1.29E-04	1.78E-04	1.78E-03	0.00E+00	0.00E+00	1.30E-04	1.30E-04	0.00E+00	3.05E-05	3.05E-05	0.14	1.36E-05	9.09E-06	3.13E-04	1.47E-01
Tasting Deck - Grading	2013	Off-Road Equipment	7.08E-04	8.41E-03	6.29E-03	8.81E-06	5.52E-04		5.52E-04	5.08E-04		5.08E-04	0.87	3.51E-05	7.03E-06		8.69E-01
Tasting Deck - Grading	2013	Worker	1.62E-04	2.23E-04	2.23E-03	0.00E+00	0.00E+00	1.63E-04	1.63E-04	0.00E+00	3.81E-05	3.81E-05	0.18	1.70E-05	1.14E-05	3.92E-04	1.84E-01
Tasting Deck - Construction	2013	Off-Road Equipment	5.92E-03	5.69E-02	3.81E-02	4.94E-05	4.54E-03		4.54E-03	4.18E-03		4.18E-03	4.86	1.97E-04	3.95E-05		4.88E+00
Tasting Deck - Construction	2013	Worker	1.20E-03	1.65E-03	1.65E-02	0.00E+00	0.00E+00	1.20E-03	1.20E-03	0.00E+00	2.82E-04	2.82E-04	1.33	1.26E-04	8.41E-05	2.90E-03	1.36E+00
Tasting Deck - Construction	2013	Vendor	4.11E-04	6.70E-03	2.08E-03	6.85E-06	2.01E-04	2.64E-04	4.65E-04	1.94E-04	7.80E-05	2.72E-04	0.97	4.25E-05	1.47E-04	1.05E-03	1.02E+00
Tasting Deck - Architectural Coating	2013	Off-Road Equipment	1.49E-03	4.42E-03	5.04E-03	5.75E-06	4.34E-04		4.34E-04	3.99E-04		3.99E-04	0.40	1.64E-05	3.28E-06		4.05E-01
Tasting Deck - Architectural Coating	2013	Architectural Coatings	8.56E-03														
Tasting Deck - Architectural Coating	2013	Worker	1.62E-04	2.23E-04	2.23E-03	0.00E+00	0.00E+00	1.63E-04	1.63E-04	0.00E+00	3.81E-05	3.81E-05	0.18	1.70E-05	1.14E-05	3.92E-04	1.84E-01
Fire Access Road - Site Preparation	2025	Off-Road Equipment	2.06E-03	1.52E-02	1.93E-02	5.59E-05	5.67E-04		5.67E-04	5.22E-04		5.22E-04	5.49	2.23E-04	4.45E-05		5.51E+00
Fire Access Road - Site Preparation	2025	Dust From Material Movement						1.17E-05	1.17E-05		1.78E-06	1.78E-06					
Fire Access Road - Site Preparation	2025	Worker	1.33E-04	1.15E-04	1.45E-03	0.00E+00	0.00E+00	3.41E-04	3.41E-04	0.00E+00	8.00E-05	8.00E-05	0.31	6.72E-06	1.23E-05	5.57E-04	3.10E-01
Secondary Access Road - Site Preparation	2025	Off-Road Equipment	2.95E-03	2.17E-02	2.75E-02	7.99E-05	8.11E-04		8.11E-04	7.46E-04		7.46E-04	7.84	3.18E-04	6.36E-05		7.87E+00
Secondary Access Road - Site Preparation	2025	Dust From Material Movement						4.11E-05	4.11E-05		6.23E-06	6.23E-06					
Secondary Access Road - Site Preparation	2025	Worker	1.90E-04	1.65E-04	2.07E-03	0.00E+00	0.00E+00	4.88E-04	4.88E-04	0.00E+00	1.14E-04	1.14E-04	0.44	9.60E-06	1.76E-05	7.95E-04	4.43E-01
Tasting Deck Mod - Grading	2025	Off-Road Equipment	1.26E-03	1.12E-02	1.76E-02	3.91E-05	4.41E-04		4.41E-04	4.06E-04		4.06E-04	3.84	1.56E-04	3.11E-05		3.85E+00
Tasting Deck Mod - Grading	2025	Dust From Material Movement						3.85E-06	3.85E-06		5.82E-07	5.82E-07					
Tasting Deck Mod - Grading	2025	Worker	7.59E-05	6.59E-05	8.29E-04	0.00E+00	0.00E+00	1.95E-04	1.95E-04	0.00E+00	4.57E-05	4.57E-05	0.17	3.84E-06	7.06E-06	3.18E-04	1.77E-01
Fire Access Road - Grading	2025	Off-Road Equipment	6.11E-03	5.43E-02	8.49E-02	1.89E-04	2.13E-03		2.13E-03	1.96E-03		1.96E-03	18.55	7.52E-04	1.50E-04		1.86E+01
Fire Access Road - Grading	2025	Dust From Material Movement						1.41E-05	1.41E-05		2.13E-06	2.13E-06					
Fire Access Road - Grading	2025	Worker	5.50E-04	4.78E-04	6.01E-03	0.00E+00	0.00E+00	1.41E-03	1.41E-03	0.00E+00	3.31E-04	3.31E-04	1.27	2.78E-05	5.12E-05	2.31E-03	1.29E+00
Fire Access Road - Grading	2025	Vendor	4.24E-05	1.56E-03	7.37E-04	8.06E-06	1.61E-05	3.02E-04	3.18E-04	1.61E-05	8.36E-05	9.97E-05	1.06	5.86E-05	1.53E-04	1.22E-03	1.11E+00
Secondary Access Road - Grading	2025	Off-Road Equipment	9.06E-03	8.05E-02	1.26E-01	2.80E-04	3.16E-03		3.16E-03	2.91E-03		2.91E-03	27.50	1.12E-03	2.23E-04		2.76E+01
Secondary Access Road - Grading	2025	Dust From Material Movement						1.02E-05	1.02E-05		1.54E-06	1.54E-06					
Secondary Access Road - Grading	2025	Worker	8.16E-04	7.09E-04	8.91E-03	0.00E+00	0.00E+00	2.10E-03	2.10E-03	0.00E+00	4.91E-04	4.91E-04	1.88	4.13E-05	7.59E-05	3.42E-03	1.91E+00
Secondary Access Road - Grading	2025	Vendor	4.19E-05	1.54E-03	7.28E-04	7.96E-06	1.59E-05	2.99E-04	3.15E-04	1.59E-05	8.27E-05	9.86E-05	1.05	5.80E-05	1.51E-04	1.21E-03	1.10E+00
Wine Cave - Grading	2025	Off-Road Equipment	5.27E-03	4.68E-02	7.32E-02	1.63E-04	1.84E-03		1.84E-03	1.69E-03		1.69E-03	15.99	6.49E-04	1.30E-04		1.60E+01
Wine Cave - Grading	2025	Dust From Material Movement						4.11E-05	4.11E-05		6.23E-06	6.23E-06					
Wine Cave - Grading	2025	Onsite truck	9.52E-05	2.39E-03	1.66E-03	4.63E-06	3.97E-06	8.21E-02	8.21E-02	2.65E-06	8.20E-03	8.20E-03	0.42	1.10E-04	6.60E-05	1.84E-04	4.40E-01
Wine Cave - Grading	2025	Worker	4.74E-04	4.12E-04	5.18E-03	0.00E+00	0.00E+00	1.22E-03	1.22E-03	0.00E+00	2.86E-04	2.86E-04	1.09	2.40E-05	4.41E-05	1.99E-03	1.11E+00
Wine Cave - Grading	2025	Vendor	2.44E-05	8.94E-04	4.23E-04	4.63E-06	9.26E-06	1.74E-04	1.83E-04	9.26E-06	4.81E-05	5.73E-05	0.61	3.37E-05	8.80E-05	7.03E-04	6.40E-01
Tasting Deck Mod - Construction	2025	Off-Road Equipment	1.59E-03	1.27E-02	8.39E-03	2.32E-05	5.17E-04		5.17E-04	4.76E-04		4.76E-04	1.51	6.11E-05	1.22E-05		1.51E+00
Tasting Deck Mod - Construction	2025	Worker	4.05E-04	3.52E-04	4.42E-03	0.00E+00	0.00E+00	1.04E-03	1.04E-03	0.00E+00	2.44E-04	2.44E-04	0.93	2.05E-05	3.76E-05	1.70E-03	9.45E-01
Tasting Deck Mod - Construction	2025	Vendor	3.12E-05	1.14E-03	5.42E-04	5.93E-06	1.19E-05	2.22E-04	2.34E-04	1.19E-05	6.15E-05	7.34E-05	0.78	4.31E-05	1.13E-04	8.99E-04	8.19E-01
Wine Cave - Construction	2025	Off-Road Equipment	1.47E-02	1.41E-01	2.15E-01	3.11E-04	6.18E-03		6.18E-03	5.68E-03		5.68E-03	29.49	1.20E-03	2.39E-04		2.96E+01
Wine Cave - Construction	2025	Worker	1.31E-03	1.14E-03	1.43E-02	0.00E+00	0.00E+00	3.37E-03	3.37E-03	0.00E+00	7.88E-04	7.88E-04	3.01	6.62E-05	1.22E-04	5.49E-03	3.06E+00
Wine Cave - Construction	2025	Vendor	6.72E-05	2.47E-03	1.17E-03	1.28E-05	2.56E-05	4.79E-04	5.05E-04	2.56E-05	1.33E-04	1.58E-04	1.69	9.30E-05	2.43E-04	1.94E-03	1.77E+00
Wine Cave - Architectural Coating	2025	Off-Road Equipment	8.53E-04	5.88E-03	7.60E-03	1.15E-05	1.83E-04		1.83E-04	1.68E-04		1.68E-04	0.81	3.28E-05	6.55E-06		8.10E-01
Wine Cave - Architectural Coating	2025	Architectural Coatings	1.57E-02														
Wine Cave - Architectural Coating	2025	Worker	1.90E-04	1.65E-04	2.07E-03	0.00E+00	0.00E+00	4.88E-04	4.88E-04	0.00E+00	1.14E-04	1.14E-04	0.44	9.60E-06	1.76E-05	7.95E-04	4.43E-01

Emissions Summary by Year		ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
2013	Tons	0.02	0.09	0.08	0.00	0.01	0.00	0.01	0.01	0.00	0.01
	Pounds	38.78	174.29	160.92	0.16	12.48	3.85	16.33	11.50	0.93	12.43
2025	Tons	0.064	0.40	0.63	0.00	0.02	0.09	0.11	0.01	0.01	0.03
	Pounds	127.94	806.23	1259.11	2.39	31.82	188.76	220.58	29.29	22.24	51.53

Daily Average Emissions (lbs/day)	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T
2013	0.84	3.79	3.50	0.00	0.27	0.08	0.35	0.25	0.02	0.27
2025	0.93	5.84	9.12	0.02	0.23	1.37	1.60	0.21	0.16	0.37

Total Construction Days

Year	Days
2013	46
2025	138

(CalEEMod output 5.1)

House Family Vineyards - Operational Criteria Air Pollutant and GHG Outputs - Baseline 1

	ROG	NOx	PM10T	PM2.5T	CO_2e
Source	tons/year				MT/yr
Mobile	0.08	0.10	0.28	0.07	262.18
Area	0.02	0.00	0.00	0.00	0.06
Energy	0.00	0.00	0.00	0.00	0.73
Water	0.00	0.00	0.00	0.00	0.28
Waste	0.00	0.00	0.00	0.00	2.43
Refrig.	0.00	0.00	0.00	0.00	0.31
Total	0.10	0.10	0.28	0.07	265.99

	ROG	NOx	PM10T	PM2.5T
Source	lb/day			
Average Daily Emissions	0.56	0.56	1.53	0.39
Threshold	54	54	82	54
Exceeds Threshold?	No	No	No	No

Notes:

1. Number of operational days per year = 365

Total Greenhouse Gas Emissions

Year	Year	MT CO2e/year
Construction	2013	9.94
Construction	2025	126.95
Operations	2026	265.99
Total GHG Emissions		402.87

House Family Vineyards - Operational Transportation Energy - Baseline Scenario 2

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Santa Clara
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/year for CVMT and EVMT, trips/year for Trips, kWh/year for Energy Consumption, tons/year for Emissions, 1000 gallons/year for Fuel Consumption

										1000 gal/yr	gal/yr/mile			
Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	% VMT	Fuel Consumption	Fuel Consumption/Mile	EVMT	Energy Consumption	Energy Consumption / Mile
Santa Clara	2026	HHDT	Aggregate	Aggregate	Gasoline	1.890207523	43737.92788	43737.92788	0.00%	10.3940766	0.237644468	0	0	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Diesel	8867.794797	316995672.7	316995672.7	1.94%	52557.12091	0.165797597	0	0	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Electricity	110.5302099	3599175.361	0	0.02%	0	0	3599175.361	6635932.828	
Santa Clara	2026	HHDT	Aggregate	Aggregate	Natural Gas	863.460788	17670241.42	17670241.42	0.11%	3431.871232	0.194217563	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Gasoline	598869.7901	7644918698	7644918698	46.68%	242520.0424	0.031723037	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Diesel	1478.944391	14724709.41	14724709.41	0.09%	329.2932522	0.022363311	0	0	
Santa Clara	2026	LDA	Aggregate	Aggregate	Electricity	64495.23744	950677794.2	0	5.80%	0	0	950677794.2	367040092.3	0.386082534
Santa Clara	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	20380.43428	300645704.8	143136402.1	1.84%	4858.741007	0.033944831	157509302.6	47572503.93	0.302029805
Santa Clara	2026	LDT1	Aggregate	Aggregate	Gasoline	50750.46627	564208285.3	564208285.3	3.44%	21463.00553	0.038040926	0	0	
Santa Clara	2026	LDT1	Aggregate	Aggregate	Diesel	18.47770915	89025.87049	89025.87049	0.00%	3.629144172	0.040765051	0	0	
Santa Clara	2026	LDT1	Aggregate	Aggregate	Electricity	263.5822489	3688221.653	0	0.02%	0	0	3688221.653	1423957.964	0.386082534
Santa Clara	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	130.6818866	2046634.317	873069.93	0.01%	29.79778701	0.034129897	1173564.387	354451.4226	0.302029805
Santa Clara	2026	LDT2	Aggregate	Aggregate	Gasoline	296178.924	3664765827	3664765827	22.37%	142902.5538	0.038993638	0	0	
Santa Clara	2026	LDT2	Aggregate	Aggregate	Diesel	1079.589347	13602449.41	13602449.41	0.08%	395.1539942	0.029050209	0	0	
Santa Clara	2026	LDT2	Aggregate	Aggregate	Electricity	2705.078634	31470547.24	0	0.19%	0	0	31470547.24	12150228.64	0.386082534
Santa Clara	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2986.35294	44380006	19885975.39	0.27%	681.7792576	0.034284426	24494030.61	7397927.284	0.302029805
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Gasoline	19567.3461	240100698.9	240100698.9	1.47%	23857.34901	0.09936393	0	0	
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Diesel	10635.30661	136234509.7	136234509.7	0.83%	8431.212649	0.061887496	0	0	
Santa Clara	2026	LHDT1	Aggregate	Aggregate	Electricity	378.0593133	7839684.779	0	0.05%	0	0	7839684.779	5134294.1	0.654910783
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Gasoline	2513.651385	29813906.2	29813906.2	0.18%	3343.254758	0.112137428	0	0	
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Diesel	4995.257652	63143935.63	63143935.63	0.39%	4663.229566	0.073850791	0	0	
Santa Clara	2026	LHDT2	Aggregate	Aggregate	Electricity	96.38373049	1903815.045	0	0.01%	0	0	1903815.045	1228079.418	0.645062356
Santa Clara	2026	MCY	Aggregate	Aggregate	Gasoline	28797.04023	57981091.18	57981091.18	0.35%	1366.822706	0.023573594	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Gasoline	162557.8711	1954069132	1954069132	11.93%	92406.88656	0.047289466	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Diesel	2430.298577	29186704.41	29186704.41	0.18%	1129.959739	0.038714879	0	0	
Santa Clara	2026	MDV	Aggregate	Aggregate	Electricity	2850.956241	33262847.38	0	0.20%	0	0	33262847.38	12842204.42	0.386082534
Santa Clara	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	1813.351494	25878469.78	11698847.91	0.16%	406.8376847	0.034775876	14179621.87	4282668.426	0.302029805
Santa Clara	2026	MH	Aggregate	Aggregate	Gasoline	2263.186255	6902439.04	6902439.04	0.04%	1562.092978	0.22631029	0	0	
Santa Clara	2026	MH	Aggregate	Aggregate	Diesel	1010.773548	3177922.415	3177922.415	0.02%	338.8524255	0.106627029	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Gasoline	1410.725867	23697246.03	23697246.03	0.14%	4833.305056	0.203960623	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Diesel	10675.11434	135862074.7	135862074.7	0.83%	15908.52784	0.11709322	0	0	
Santa Clara	2026	MHDT	Aggregate	Aggregate	Electricity	167.5841413	2779164.5	0	0.02%	0	0	2779164.5	3044223.016	1.095373453
Santa Clara	2026	MHDT	Aggregate	Aggregate	Natural Gas	107.6314115	1529352.549	1529352.549	0.01%	212.3133025	0.138825611	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Gasoline	419.1997068	5939010.543	5939010.543	0.04%	1206.646049	0.203172909	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Diesel	949.0451881	18300948.27	18300948.27	0.11%	2285.244006	0.124870251	0	0	
Santa Clara	2026	OBUS	Aggregate	Aggregate	Electricity	4.484159388	119285.7179	0	0.00%	0	0	119285.7179	132150.3238	1.107846992
Santa Clara	2026	OBUS	Aggregate	Aggregate	Natural Gas	9.101243919	175193.8983	175193.8983	0.00%	22.16571281	0.126521032	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Gasoline	183.7933038	2960838.069	2960838.069	0.02%	295.688902	0.099866624	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Diesel	674.9981098	4973962.315	4973962.315	0.03%	604.1911821	0.1214708	0	0	
Santa Clara	2026	SBUS	Aggregate	Aggregate	Electricity	7.587222005	79866.31526	0	0.00%	0	0	79866.31526	84135.61628	1.05345559
Santa Clara	2026	SBUS	Aggregate	Aggregate	Natural Gas	26.1646758	210114.588	210114.588	0.00%	37.73587541	0.179596647	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Gasoline	46.35522027	1582962.783	1582962.783	0.01%	170.5751915	0.107756918	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Diesel	396.7700483	14415481.73	14415481.73	0.09%	1576.102377	0.109334007	0	0	
Santa Clara	2026	UBUS	Aggregate	Aggregate	Electricity	28.6595887	979547.4562	0	0.01%	0	0	979547.4562	1707590.342	1.743244119
Santa Clara	2026	UBUS	Aggregate	Aggregate	Natural Gas	62.84534982	2373101.868	2373101.868	0.01%	399.3950291	0.168300836	0	0	
									100.00%					

Total Annual Project VMT: 800,243

% VMT by Fuel:	
Diesel	5%
Gasoline	87%
Natural Gas	0%
Electricity	6%
Plug-In Hybrid	2%
Total	100%

Weighted Average Fuel Consumption:		Unit
Diesel	0.11751918	gal/mi
Gasoline	0.03775017	gal/mi
Natural Gas	0.18687860	gal/mi
Electricity	0.39057022	kWh/mi
Plug-In Hybrid	0.03404392	gal/mi
Plug-In Hybrid	0.30202980	kWh/mi

Fuel/Energy Use by Type		Unit
Diesel	4,310	gal/year
Gasoline	26,185	gal/year
Natural Gas	200	gal/year
Electricity	25,280	kWh/year
Plug-In Hybrid	620	gal/year

*Note that natural gas consumption is negligible and not accounted for in summary tab. Plug-in Hybrid is summed with Gasoline in Summary Tab.
Total Annual Project VMT is based on anticipated post-project annual average daily trips.

Note that grey highlighted columns indicated calculations using EMFAC data, not data output from EMFAC.

House Family Vineyards - Energy Consumption Summary

Project: Energy Consumption Summary	Baseline Scenario 1			Baseline Scenario 2		
Phase	Energy Requirement	Unit	Annual Energy Consumption (MMBtu)	Energy Requirement	Unit	Annual Energy Consumption (MMBtu)
Construction[1]						
Diesel	11,446	gallons/yr	1,581	12,230	Gallons/yr	1,689
Gasoline	1,177	gallons/yr	147	1,403	Gallons/yr	175
		Total Construction	*1,728*		*Total Construction*	*1,864*
Winery Operations[2]						
Building Electricity	7,800	KWh/yr	27	7,800	KWh/yr	27
Water Electricity	689	KWh/yr	2	689	KWh/yr	2
		Subtotal	*29*		*Subtotal*	*29*
Operational Transportation[3]						
Electricity	14,658	KWh/yr	50	25,280	KWh/yr	86
Diesel	2,499	Gallons/yr	345	4,310	Gallons/yr	595
Gasoline	15,542	Gallons/yr	1,943	26,805	Gallons/yr	3,351
		Subtotal	*2,338*		*Subtotal*	*4,032*
		Total Operational	*2,367*		*Total Operational*	*4,061*

Notes:

Totals do not add due to rounding.

Source: Modeled by AECOM in 2022

Notes:

1. Construction estimates are based on conversion for CO_2 emissions estimates from CalEEMod to fuel consumption for diesel and gasoline-powered vehicles using U.S. Energy Information Administration 2023 factors.
2. Building operation energy consumption is based on estimated electricity and natural gas demand from CalEEMod. The analysis conservatively does not include the renewable energy generated via the rooftop solar panels.
3. Operational transportation fuel consumption reflects CalEEMod VMT estimate, which incorporates trip generation data provided by the Traffic Study for the Project and the fleet mix for Santa Clara County for a 2026 operational year.

Conversion Factors

Category	Amount	Units
Diesel (heat content)	5.8	MMBtu/barrel
Motor Gasoline	5.25	MMBtu/barrel
Btu per kWh	3,412	Btu/kWh
Gallons per Barrel	42	gallons/barrel

https://www.theclimateregistry.org/wp-content/uploads/2021/05/2021-Default-Emission-Factor-Document.pdf

Water Energy Demand by Land Use

Project Component	CalEEMod Land Use	Electricity Intensity: Supply, Treat and Distribute (kWh/Mgal)	Electricity Intensity: Treatment (kWh/Mgal)	Indoor Water Usage (gal/year)	Outdoor Water Usage (gal/year)	Indoor Water Electricity Usage (kWh)	Outdoor Water Electricity Usage (kWh)	Total Water Electricity Usage (kWh)
Tasting Deck	Quality Restaurant	1,612	1,519	75,000	281,939	*235*	*454*	689
Wine Cave	Other Non-Asphalt Surfaces	1,612	1,519	*included above*	-	-	-	-
Fire Access Road	User Defined Recreational	1,612	1,519	-	-	-	-	-
Secondary Access Road	Other Non-Asphalt Surfaces	1,612	1,519	-	-	-	-	-
Parking Stalls	Other Non-Asphalt Surfaces	1,612	1,519	-	-	-	-	-
Total		--	--	75,000	281,939	235	454	689

Notes:

1. Electricity Intensity Factors are CalEEMod defaults.
2. Indoor water usage provided by applicant.
2. Outdoor water usage is CalEEMod default, assuming a "landscaped area" equivalent to the size of the easement exchange.

Project: Construction-Related Energy Consumption		Baseline 1			Baseline 2		
Source	Fuel Type	MT CO_2[1]	Factor[2] (MT CO_2/gallon)	Gallons	MT CO_2[1]	Factor[2] (MT CO_2/gallon)	Gallons
Off-Road Equipment	Diesel	111	0.01019	10,894	118	0.01019	11,583
Onsite Truck	Diesel	0.4	0.01019	41	0.4	0.01019	41
Vendor	Diesel	5	0.01019	511	6	0.01019	606
Worker	Gas	10	0.0081	1,177	11	0.0081	1,403
		Total	Diesel	11,446	Total	Diesel	12,230
			Gasoline	1,177		Gasoline	1,403

Notes:

1. Carbon dioxide emissions (MT CO_2) from CalEEMod construction emission modeling outputs for each baseline scenario.
2. Carbon dioxide emissions coefficients from7/19/2024 https://www.eia.gov/environment/emissions/co2_vol_mass.php

House Family Vineyards - Baseline 1 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	House Family Vineyards - Baseline 1
Construction Start Date	2/3/2025
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	25.6
Location	37.2767440497056, -122.0517233363137
County	Santa Clara
City	Saratoga
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1788
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

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
Quality Restaurant	1.20	1000sqft	0.03	1,200	26,373	—	—	—

Other Non-Asphalt Surfaces	2.43	1000sqft	0.06	0.00	0.00	—	—	—
User Defined Recreational	1.00	User Defined Unit	0.06	2,600	0.00	—	—	—
Other Non-Asphalt Surfaces	19.8	1000sqft	0.45	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	9.63	1000sqft	0.22	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.21	5.99	9.24	15.1	0.03	0.36	7.30	7.60	0.34	0.76	1.04	—	3,436	3,436	0.14	0.06	1.50	3,454
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.68	0.57	4.66	6.98	0.01	0.18	7.18	7.33	0.17	0.73	0.87	—	1,695	1,695	0.07	0.03	0.02	1,704
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.45	0.40	2.21	3.45	0.01	0.09	0.52	0.60	0.08	0.06	0.14	—	762	762	0.03	0.01	0.14	767
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.08	0.07	0.40	0.63	< 0.005	0.02	0.09	0.11	0.01	0.01	0.03	—	126	126	0.01	< 0.005	0.02	127

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	6.21	5.99	9.24	15.1	0.03	0.36	7.30	7.60	0.34	0.76	1.04	—	3,436	3,436	0.14	0.06	1.50	3,454
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.68	0.57	4.66	6.98	0.01	0.18	7.18	7.33	0.17	0.73	0.87	—	1,695	1,695	0.07	0.03	0.02	1,704
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.45	0.40	2.21	3.45	0.01	0.09	0.52	0.60	0.08	0.06	0.14	—	762	762	0.03	0.01	0.14	767
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.08	0.07	0.40	0.63	< 0.005	0.02	0.09	0.11	0.01	0.01	0.03	—	126	126	0.01	< 0.005	0.02	127

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.43	0.40	0.30	3.69	0.01	0.01	0.90	0.90	0.01	0.23	0.23	4.35	962	967	0.46	0.03	5.34	993
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.39	0.36	0.35	3.07	0.01	0.01	0.90	0.90	0.01	0.23	0.23	4.35	903	907	0.47	0.04	1.97	932
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.40	0.37	0.33	3.13	0.01	0.01	0.88	0.89	0.01	0.22	0.23	4.35	912	916	0.47	0.03	3.37	941
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.07	0.06	0.57	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	0.72	151	152	0.08	0.01	0.56	156

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.30	0.27	0.30	3.52	0.01	0.01	0.90	0.90	0.01	0.23	0.23	—	956	956	0.03	0.03	3.46	970
Area	0.13	0.12	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	0.43	0.40	0.30	3.69	0.01	0.01	0.90	0.90	0.01	0.23	0.23	4.35	962	967	0.46	0.03	5.34	993
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.29	0.26	0.35	3.07	0.01	0.01	0.90	0.90	0.01	0.23	0.23	—	898	898	0.03	0.04	0.09	909
Area	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	0.39	0.36	0.35	3.07	0.01	0.01	0.90	0.90	0.01	0.23	0.23	4.35	903	907	0.47	0.04	1.97	932
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	0.29	0.26	0.33	3.05	0.01	0.01	0.88	0.89	0.01	0.22	0.23	—	906	906	0.03	0.03	1.49	918
Area	0.11	0.11	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.34	0.34	< 0.005	< 0.005	—	0.34
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	0.40	0.37	0.33	3.13	0.01	0.01	0.88	0.89	0.01	0.22	0.23	4.35	912	916	0.47	0.03	3.37	941
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.05	0.06	0.56	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	—	150	150	< 0.005	0.01	0.25	152
Area	0.02	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.72	0.72	< 0.005	< 0.005	—	0.73
Water	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28
Waste	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	0.07	0.07	0.06	0.57	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	0.72	151	152	0.08	0.01	0.56	156

3. Construction Emissions Details

3.1. Fire Access Road - Site Preparation (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	0.70	0.59	4.34	5.51	0.02	0.16	—	0.16	0.15	—	0.15	—	1,729	1,729	0.07	0.01	—	1,735

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	—	5.51
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.87
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.31
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. Secondary Access Road - Site Preparation (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	0.70	0.59	4.34	5.51	0.02	0.16	—	0.16	0.15	—	0.15	—	1,729	1,729	0.07	0.01	—	1,735
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.68
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
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

3.5. Tasting Deck Mod - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.84	3.84	< 0.005	< 0.005	—	3.85
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.03	0.03	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.5	63.5	< 0.005	< 0.005	0.01	64.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
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

3.7. Fire Access Road - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	112	112	< 0.005	< 0.005	—	112
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.5	18.5	< 0.005	< 0.005	—	18.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.9	80.9	< 0.005	0.01	0.21	84.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	0.01	7.76
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.72
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	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.11
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. Secondary Access Road - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.44	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	166	166	0.01	< 0.005	—	167
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.08	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.5	27.5	< 0.005	< 0.005	—	27.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.36	6.36	< 0.005	< 0.005	0.01	6.65
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	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.10
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

3.11. Wine Cave - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.19	0.13	< 0.005	< 0.005	7.07	7.07	< 0.005	0.71	0.71	—	36.7	36.7	0.01	0.01	0.04	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.20	0.14	< 0.005	< 0.005	7.07	7.07	< 0.005	0.71	0.71	—	37.0	37.0	0.01	0.01	< 0.005	39.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	96.6	96.6	< 0.005	< 0.005	—	96.9
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.45	0.45	< 0.005	0.04	0.04	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.0
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.01	96.6
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	< 0.005	56.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	0.01	6.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.86
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	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
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

3.13. Tasting Deck Mod - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	0.52	< 0.005	0.03	—	0.03	0.03	—	0.03	—	104	104	< 0.005	< 0.005	—	104
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	0.01	0.01	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.10	9.10	< 0.005	< 0.005	—	9.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.51	1.51	< 0.005	< 0.005	—	1.51
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	0.03	0.03	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.5	63.5	< 0.005	< 0.005	0.01	64.4
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	< 0.005	56.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.71
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.73	4.73	< 0.005	< 0.005	0.01	4.95
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.82
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. Wine Cave - 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	0.51	0.43	4.09	6.22	0.01	0.18	—	0.18	0.16	—	0.16	—	942	942	0.04	0.01	—	945

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	1.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
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	0.01	0.14	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
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	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.2	18.2	< 0.005	< 0.005	0.03	18.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	—	3.01	3.01	< 0.005	< 0.005	0.01	3.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	< 0.005	1.77
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

3.17. Wine Cave - Architectural Coating (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	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	4.85	4.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.88	4.88	< 0.005	< 0.005	—	4.89
Architectural Coatings	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.68
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
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

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

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72	< 0.005	< 0.005	—	0.73
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72	< 0.005	< 0.005	—	0.73

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Total	0.13	0.12	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Total	0.02	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Fire Access Road - Site Preparation	Site Preparation	4/11/2025	4/21/2025	5.00	7.00	—
Secondary Access Road - Site Preparation	Site Preparation	6/2/2025	6/13/2025	5.00	10.0	—
Tasting Deck Mod - Grading	Grading	2/12/2025	2/19/2025	5.00	6.00	—
Fire Access Road - Grading	Grading	4/22/2025	5/30/2025	5.00	29.0	—
Secondary Access Road - Grading	Grading	6/16/2025	8/13/2025	5.00	43.0	—
Wine Cave - Grading	Grading	3/19/2025	4/22/2025	5.00	25.0	—
Tasting Deck Mod - Construction	Building Construction	2/3/2025	3/18/2025	5.00	32.0	—
Wine Cave - Construction	Building Construction	4/23/2025	7/28/2025	5.00	69.0	—
Wine Cave - Architectural Coating	Architectural Coating	7/21/2025	8/1/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Fire Access Road - Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Fire Access Road - Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Fire Access Road - Site Preparation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20

Secondary Access Road - Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Secondary Access Road - Site Preparation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Secondary Access Road - Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tasting Deck Mod - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Tasting Deck Mod - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Tasting Deck Mod - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Fire Access Road - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Fire Access Road - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Fire Access Road - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Secondary Access Road - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Secondary Access Road - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Secondary Access Road - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Wine Cave - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Wine Cave - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Wine Cave - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Tasting Deck Mod - Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Wine Cave - Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20

Wine Cave - Construction	Tractors/Loaders/Back	Diesel	Average	2.00	8.00	84.0	0.37
Wine Cave - Construction	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Wine Cave - Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Tasting Deck Mod - Grading	—	—	—	—
Tasting Deck Mod - Grading	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck Mod - Grading	Vendor	—	8.40	HHDT,MHDT
Tasting Deck Mod - Grading	Hauling	0.00	20.0	HHDT
Tasting Deck Mod - Grading	Onsite truck	—	—	HHDT
Fire Access Road - Site Preparation	—	—	—	—
Fire Access Road - Site Preparation	Worker	12.0	11.7	LDA,LDT1,LDT2
Fire Access Road - Site Preparation	Vendor	—	8.40	HHDT,MHDT
Fire Access Road - Site Preparation	Hauling	0.00	20.0	HHDT
Fire Access Road - Site Preparation	Onsite truck	0.00	0.00	HHDT
Secondary Access Road - Site Preparation	—	—	—	—
Secondary Access Road - Site Preparation	Worker	12.0	11.7	LDA,LDT1,LDT2
Secondary Access Road - Site Preparation	Vendor	—	8.40	HHDT,MHDT
Secondary Access Road - Site Preparation	Hauling	0.00	20.0	HHDT
Secondary Access Road - Site Preparation	Onsite truck	0.00	0.00	HHDT

Fire Access Road - Grading	—	—	—	—
Fire Access Road - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Fire Access Road - Grading	Vendor	3.00	8.40	HHDT,MHDT
Fire Access Road - Grading	Hauling	0.00	20.0	HHDT
Fire Access Road - Grading	Onsite truck	—	—	HHDT
Secondary Access Road - Grading	—	—	—	—
Secondary Access Road - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Secondary Access Road - Grading	Vendor	2.00	8.40	HHDT,MHDT
Secondary Access Road - Grading	Hauling	0.00	20.0	HHDT
Secondary Access Road - Grading	Onsite truck	—	—	HHDT
Wine Cave - Grading	—	—	—	—
Wine Cave - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Grading	Vendor	2.00	8.40	HHDT,MHDT
Wine Cave - Grading	Hauling	0.00	20.0	HHDT
Wine Cave - Grading	Onsite truck	12.0	0.40	HHDT
Tasting Deck Mod - Construction	—	—	—	—
Tasting Deck Mod - Construction	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck Mod - Construction	Vendor	2.00	8.40	HHDT,MHDT
Tasting Deck Mod - Construction	Hauling	0.00	20.0	HHDT
Tasting Deck Mod - Construction	Onsite truck	—	—	HHDT
Wine Cave - Construction	—	—	—	—
Wine Cave - Construction	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Construction	Vendor	2.00	8.40	HHDT,MHDT
Wine Cave - Construction	Hauling	0.00	20.0	HHDT
Wine Cave - Construction	Onsite truck	—	—	HHDT
Wine Cave - Architectural Coating	—	—	—	—
Wine Cave - Architectural Coating	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Architectural Coating	Vendor	—	8.40	HHDT,MHDT

Wine Cave - Architectural Coating	Hauling	0.00	20.0	HHDT
Wine Cave - Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Wine Cave - Architectural Coating	0.00	0.00	5,700	1,900	1,912

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)
Fire Access Road - Site Preparation	—	403	0.00	0.00	—
Secondary Access Road - Site Preparation	—	1,411	0.00	0.00	—
Tasting Deck Mod - Grading	132	—	0.00	0.00	—
Fire Access Road - Grading	483	—	0.00	0.00	—
Secondary Access Road - Grading	349	—	0.00	0.00	—
Wine Cave - Grading	—	1,411	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Quality Restaurant	0.00	0%
Other Non-Asphalt Surfaces	0.06	0%
User Defined Recreational	0.00	0%
Other Non-Asphalt Surfaces	0.45	0%
Other Non-Asphalt Surfaces	0.22	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	69.0	69.0	69.0	25,185	1,271	1,271	1,271	464,006

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	5,700	1,900	1,912

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Quality Restaurant	7,800	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Quality Restaurant	75,000	281,939
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Recreational	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Quality Restaurant	7.80	—
Other Non-Asphalt Surfaces	0.00	—
User Defined Recreational	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	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
Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

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	13.4	annual days of extreme heat
Extreme Precipitation	9.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.65	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	3	0	0	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6

AQ-PM	9.50
AQ-DPM	6.85
Drinking Water	31.1
Lead Risk Housing	20.8
Pesticides	35.5
Toxic Releases	54.8
Traffic	14.3
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	74.8
Haz Waste Facilities/Generators	50.1
Impaired Water Bodies	43.8
Solid Waste	2.52
Sensitive Population	—
Asthma	1.27
Cardio-vascular	6.93
Low Birth Weights	30.6
Socioeconomic Factor Indicators	—
Education	5.50
Housing	3.27
Linguistic	39.2
Poverty	3.07
Unemployment	14.4

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	98.94777364
Employed	52.68831002
Median HI	99.79468754
Education	—
Bachelor's or higher	98.52431669
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	76.73553189
Active commuting	1.039394328
Social	—
2-parent households	77.95457462
Voting	90.91492365
Neighborhood	—
Alcohol availability	74.05363788
Park access	27.97382266
Retail density	12.03644296
Supermarket access	25.88220198
Tree canopy	96.25304761
Housing	—
Homeownership	94.09726678
Housing habitability	95.0468369
Low-inc homeowner severe housing cost burden	88.95162325
Low-inc renter severe housing cost burden	73.93814962
Uncrowded housing	88.2586937
Health Outcomes	—
Insured adults	99.42255871
Arthritis	0.0

Asthma ER Admissions	96.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	97.9
Cognitively Disabled	90.0
Physically Disabled	96.1
Heart Attack ER Admissions	87.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	57.4
SLR Inundation Area	0.0
Children	97.0
Elderly	16.8
English Speaking	65.2
Foreign-born	81.3

Outdoor Workers	91.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.4
Traffic Density	8.4
Traffic Access	23.0
Other Indices	—
Hardship	1.5
Other Decision Support	—
2016 Voting	91.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	2.00
Healthy Places Index Score for Project Location (b)	99.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Wine cave is 2600 sq ft/0.059 acres
Construction: Construction Phases	Schedule per project plans
Construction: Off-Road Equipment	Assumed 8 hours/day for all equipment per construction plans. Equipment provided by HFV
Operations: Energy Use	Operational electricity consumption provided by HFV
Operations: Water and Waste Water	Indoor water usage provided by HFV
Operations: Solid Waste	6 cy waste per week provided by HFV. Assumes 50 lb/cy
Construction: Trips and VMT	Number of workers, offsite and onsite haul trips provided by HFV. Onsite distances measured along road from furthest distance of project element to onsite quarry location.

House Family Vineyards - Baseline 2 Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	House Family Vineyards - Baseline 2
Construction Start Date	2/4/2013
Operational Year	2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	25.6
Location	37.2767440497056, -122.0517233363137
County	Santa Clara
City	Saratoga
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1788
EDFZ	1
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.26

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
Quality Restaurant	1.20	1000sqft	0.03	1,200	26,373	—	—	—

Other Non-Asphalt Surfaces	2.43	1000sqft	0.06	0.00	0.00	—	—	—
User Defined Recreational	1.00	User Defined Unit	0.06	2,600	0.00	—	—	—
Other Non-Asphalt Surfaces	19.8	1000sqft	0.45	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	9.63	1000sqft	0.22	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	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.	4.71	4.50	9.24	15.1	0.03	0.43	7.30	7.60	0.40	0.76	1.04	—	3,436	3,436	0.14	0.06	1.50	3,454
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.70	4.49	5.40	6.98	0.01	0.43	7.18	7.33	0.40	0.73	0.87	—	1,695	1,695	0.07	0.03	0.02	1,704
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.40	0.35	2.21	3.45	0.01	0.09	0.52	0.60	0.08	0.06	0.14	—	762	762	0.03	0.01	0.14	767
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	0.06	0.40	0.63	< 0.005	0.02	0.09	0.11	0.01	0.01	0.03	—	126	126	0.01	< 0.005	0.02	127

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2013	4.71	4.50	5.34	6.24	0.01	0.43	0.15	0.58	0.40	0.04	0.43	—	695	695	0.04	0.02	0.95	704
2025	4.50	4.28	9.24	15.1	0.03	0.36	7.30	7.60	0.34	0.76	1.04	—	3,436	3,436	0.14	0.06	1.50	3,454
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2013	4.70	4.49	5.40	6.02	0.01	0.43	0.15	0.58	0.40	0.04	0.43	—	682	682	0.04	0.02	0.02	690
2025	0.68	0.57	4.66	6.98	0.01	0.18	7.18	7.33	0.17	0.73	0.87	—	1,695	1,695	0.07	0.03	0.02	1,704
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2013	0.12	0.11	0.48	0.44	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	—	59.3	59.3	< 0.005	< 0.005	0.03	60.0
2025	0.40	0.35	2.21	3.45	0.01	0.09	0.52	0.60	0.08	0.06	0.14	—	762	762	0.03	0.01	0.14	767
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2013	0.02	0.02	0.09	0.08	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	9.82	9.82	< 0.005	< 0.005	0.01	9.94
2025	0.07	0.06	0.40	0.63	< 0.005	0.02	0.09	0.11	0.01	0.01	0.03	—	126	126	0.01	< 0.005	0.02	127

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.65	0.59	0.51	6.24	0.02	0.01	1.55	1.56	0.01	0.39	0.40	4.35	1,655	1,659	0.49	0.06	7.85	1,696
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.61	0.55	0.60	5.29	0.02	0.01	1.55	1.56	0.01	0.39	0.40	4.35	1,554	1,558	0.49	0.06	2.03	1,590
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.61	0.56	0.56	5.34	0.02	0.01	1.52	1.53	0.01	0.39	0.39	4.35	1,568	1,572	0.49	0.06	4.45	1,607
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.10	0.10	0.98	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	0.72	260	260	0.08	0.01	0.74	266

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.53	0.47	0.51	6.08	0.02	0.01	1.55	1.56	0.01	0.39	0.40	—	1,649	1,649	0.05	0.06	5.97	1,673
Area	0.13	0.12	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	0.65	0.59	0.51	6.24	0.02	0.01	1.55	1.56	0.01	0.39	0.40	4.35	1,655	1,659	0.49	0.06	7.85	1,696
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.51	0.45	0.60	5.29	0.02	0.01	1.55	1.56	0.01	0.39	0.40	—	1,548	1,548	0.05	0.06	0.15	1,568
Area	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88

Total	0.61	0.55	0.60	5.29	0.02	0.01	1.55	1.56	0.01	0.39	0.40	4.35	1,554	1,558	0.49	0.06	2.03	1,590
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.50	0.45	0.56	5.26	0.02	0.01	1.52	1.53	0.01	0.39	0.39	—	1,562	1,562	0.05	0.06	2.58	1,584
Area	0.11	0.11	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.34	0.34	< 0.005	< 0.005	—	0.34
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Water	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Waste	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	0.61	0.56	0.56	5.34	0.02	0.01	1.52	1.53	0.01	0.39	0.39	4.35	1,568	1,572	0.49	0.06	4.45	1,607
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.09	0.08	0.10	0.96	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	—	259	259	0.01	0.01	0.43	262
Area	0.02	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.72	0.72	< 0.005	< 0.005	—	0.73
Water	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28
Waste	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	0.11	0.10	0.10	0.98	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	0.72	260	260	0.08	0.01	0.74	266

3. Construction Emissions Details

3.1. Fire Access Road - Site Preparation (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	0.70	0.59	4.34	5.51	0.02	0.16	—	0.16	0.15	—	0.15	—	1,729	1,729	0.07	0.01	—	1,735
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	33.2	33.2	< 0.005	< 0.005	—	33.3
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.49	5.49	< 0.005	< 0.005	—	5.51
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.87
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.31	0.31	< 0.005	< 0.005	< 0.005	0.31
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. Secondary Access Road - Site Preparation (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	0.70	0.59	4.34	5.51	0.02	0.16	—	0.16	0.15	—	0.15	—	1,729	1,729	0.07	0.01	—	1,735

Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.4	47.4	< 0.005	< 0.005	—	47.5
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.84	7.84	< 0.005	< 0.005	—	7.87
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.68
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
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

3.5. Tasting Deck - Site Prep (2013) - 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	0.39	0.33	4.21	3.12	< 0.005	0.26	—	0.26	0.24	—	0.24	—	489	489	0.02	< 0.005	—	491
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.36	5.36	< 0.005	< 0.005	—	5.38
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.89	0.89	< 0.005	< 0.005	—	0.89
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	0.91	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.2	78.2	0.01	0.01	0.01	80.0
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.87	0.87	< 0.005	< 0.005	< 0.005	0.89
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.14	0.14	< 0.005	< 0.005	< 0.005	0.15
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

3.7. Tasting Deck Mod - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.01	0.01	0.06	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	23.2	23.2	< 0.005	< 0.005	—	23.3
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.84	3.84	< 0.005	< 0.005	—	3.85
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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	0.03	0.03	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.5	63.5	< 0.005	< 0.005	0.01	64.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.07
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.17	0.17	< 0.005	< 0.005	< 0.005	0.18
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

3.9. Fire Access Road - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.30	0.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	112	112	< 0.005	< 0.005	—	112
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.5	18.5	< 0.005	< 0.005	—	18.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.10	0.05	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	—	80.9	80.9	< 0.005	0.01	0.21	84.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.65	7.65	< 0.005	< 0.005	0.01	7.76
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.72
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	—	1.27	1.27	< 0.005	< 0.005	< 0.005	1.29
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.06	1.06	< 0.005	< 0.005	< 0.005	1.11
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

3.11. Secondary Access Road - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.44	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	166	166	0.01	< 0.005	—	167
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.08	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	27.5	27.5	< 0.005	< 0.005	—	27.6
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	0.02	11.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.36	6.36	< 0.005	< 0.005	0.01	6.65
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	—	1.88	1.88	< 0.005	< 0.005	< 0.005	1.91
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.05	1.05	< 0.005	< 0.005	< 0.005	1.10
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

3.13. Wine Cave - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.19	0.13	< 0.005	< 0.005	7.07	7.07	< 0.005	0.71	0.71	—	36.7	36.7	0.01	0.01	0.04	38.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	3.74	5.86	0.01	0.15	—	0.15	0.14	—	0.14	—	1,410	1,410	0.06	0.01	—	1,415
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.02	0.01	0.20	0.14	< 0.005	< 0.005	7.07	7.07	< 0.005	0.71	0.71	—	37.0	37.0	0.01	0.01	< 0.005	39.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	0.40	< 0.005	0.01	—	0.01	0.01	—	0.01	—	96.6	96.6	< 0.005	< 0.005	—	96.9
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.45	0.45	< 0.005	0.04	0.04	—	2.52	2.52	< 0.005	< 0.005	< 0.005	2.66
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.0	16.0	< 0.005	< 0.005	—	16.0
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.08	0.08	< 0.005	0.01	0.01	—	0.42	0.42	< 0.005	< 0.005	< 0.005	0.44
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.42	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	95.3	95.3	< 0.005	< 0.005	0.01	96.6
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	< 0.005	56.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	0.01	6.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.70	3.70	< 0.005	< 0.005	< 0.005	3.86
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	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.11

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.61	0.61	< 0.005	< 0.005	< 0.005	0.64
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. Tasting Deck - Grading (2013) - 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	0.34	0.28	3.36	2.51	< 0.005	0.22	—	0.22	0.20	—	0.20	—	382	382	0.02	< 0.005	—	383
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.23	5.23	< 0.005	< 0.005	—	5.25
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.87	0.87	< 0.005	< 0.005	—	0.87
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	0.91	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.2	78.2	0.01	0.01	0.01	80.0
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.08	1.08	< 0.005	< 0.005	< 0.005	1.11
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
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

3.17. Tasting Deck Mod - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.79	0.52	< 0.005	0.03	—	0.03	0.03	—	0.03	—	104	104	< 0.005	< 0.005	—	104
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	0.01	0.01	0.07	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	9.10	9.10	< 0.005	< 0.005	—	9.14
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.51	1.51	< 0.005	< 0.005	—	1.51
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	0.03	0.03	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	63.5	63.5	< 0.005	< 0.005	0.01	64.4
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	< 0.005	56.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.63	5.63	< 0.005	< 0.005	0.01	5.71
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.73	4.73	< 0.005	< 0.005	0.01	4.95
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.78	0.78	< 0.005	< 0.005	< 0.005	0.82
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

3.19. Wine Cave - 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	0.51	0.43	4.09	6.22	0.01	0.18	—	0.18	0.16	—	0.16	—	942	942	0.04	0.01	—	945
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.08	0.77	1.18	< 0.005	0.03	—	0.03	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
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	0.01	0.14	0.21	< 0.005	0.01	—	0.01	0.01	—	0.01	—	29.5	29.5	< 0.005	< 0.005	—	29.6
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	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
Vendor	0.01	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	54.0	54.0	< 0.005	0.01	0.14	56.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.2	18.2	< 0.005	< 0.005	0.03	18.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.01	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	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	—	3.01	3.01	< 0.005	< 0.005	0.01	3.06
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.69	1.69	< 0.005	< 0.005	< 0.005	1.77
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

3.21. Tasting Deck - Construction (2013) - 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	0.38	0.32	3.08	2.06	< 0.005	0.25	—	0.25	0.23	—	0.23	—	290	290	0.01	< 0.005	—	291
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	0.38	0.32	3.08	2.06	< 0.005	0.25	—	0.25	0.23	—	0.23	—	290	290	0.01	< 0.005	—	291
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	0.04	0.03	0.31	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	29.4	29.4	< 0.005	< 0.005	—	29.5
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.86	4.86	< 0.005	< 0.005	—	4.88

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	0.08	0.07	0.08	1.03	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	84.8	84.8	0.01	0.01	0.40	86.8
Vendor	0.03	0.02	0.35	0.11	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.01	—	58.0	58.0	< 0.005	0.01	0.15	60.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	0.91	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.2	78.2	0.01	0.01	0.01	80.0
Vendor	0.03	0.02	0.37	0.12	< 0.005	0.01	0.01	0.03	0.01	< 0.005	0.01	—	57.9	57.9	< 0.005	0.01	< 0.005	60.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.02	8.02	< 0.005	< 0.005	0.02	8.21
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.88	5.88	< 0.005	< 0.005	0.01	6.15
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	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.33	1.33	< 0.005	< 0.005	< 0.005	1.36
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.97	0.97	< 0.005	< 0.005	< 0.005	1.02
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Wine Cave - Architectural Coating (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	0.21	0.17	1.18	1.52	< 0.005	0.04	—	0.04	0.03	—	0.03	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	3.14	3.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.03	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.88	4.88	< 0.005	< 0.005	—	4.89
Architectural Coatings	0.09	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.81	0.81	< 0.005	< 0.005	—	0.81
Architectural Coatings	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.49	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.41	104
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	< 0.005	2.68
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
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

3.25. Tasting Deck - Architectural Coating (2013) - 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	0.72	0.60	1.77	2.01	< 0.005	0.17	—	0.17	0.16	—	0.16	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	3.42	3.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.72	0.60	1.77	2.01	< 0.005	0.17	—	0.17	0.16	—	0.16	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	3.42	3.42	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.01	0.01	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.44	2.44	< 0.005	< 0.005	—	2.45
Architectural Coatings	0.05	0.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.40	0.40	< 0.005	< 0.005	—	0.41
Architectural Coatings	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	0.08	0.07	0.08	1.03	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	84.8	84.8	0.01	0.01	0.40	86.8
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.10	0.91	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.2	78.2	0.01	0.01	0.01	80.0
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.08	1.08	< 0.005	< 0.005	< 0.005	1.11
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	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.18	0.18	< 0.005	< 0.005	< 0.005	0.18
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

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

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4.36	4.36	< 0.005	< 0.005	—	4.40
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72	< 0.005	< 0.005	—	0.73
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.72	0.72	< 0.005	< 0.005	—	0.73

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	0.00	0.00	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
User Defined Recreational	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.03	0.03	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Total	0.13	0.12	< 0.005	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.68	0.68	< 0.005	< 0.005	—	0.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.08	0.08	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.10	0.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06
Total	0.02	0.02	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.06	0.06	< 0.005	< 0.005	—	0.06

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.14	1.05	1.19	0.01	< 0.005	—	1.68
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.02	0.17	0.20	< 0.005	< 0.005	—	0.28

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	4.20	0.00	4.20	0.42	0.00	—	14.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Recreational	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.70	0.00	0.70	0.07	0.00	—	2.43

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.88	1.88
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Quality Restaurant	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.31	0.31

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

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Fire Access Road - Site Preparation	Site Preparation	4/11/2025	4/21/2025	5.00	7.00	—
Secondary Access Road - Site Preparation	Site Preparation	6/2/2025	6/13/2025	5.00	10.0	—
Tasting Deck - Site Prep	Site Preparation	2/4/2013	2/7/2013	5.00	4.00	—
Tasting Deck Mod - Grading	Grading	2/12/2025	2/19/2025	5.00	6.00	—
Fire Access Road - Grading	Grading	4/22/2025	5/30/2025	5.00	29.0	—
Secondary Access Road - Grading	Grading	6/16/2025	8/13/2025	5.00	43.0	—
Wine Cave - Grading	Grading	3/19/2025	4/22/2025	5.00	25.0	—
Tasting Deck - Grading	Grading	2/8/2013	2/14/2013	5.00	5.00	—
Tasting Deck Mod - Construction	Building Construction	2/3/2025	3/18/2025	5.00	32.0	—
Wine Cave - Construction	Building Construction	4/23/2025	7/28/2025	5.00	69.0	—
Tasting Deck - Construction	Building Construction	2/15/2013	4/8/2013	5.00	37.0	—
Wine Cave - Architectural Coating	Architectural Coating	7/21/2025	8/1/2025	5.00	10.0	—
Tasting Deck - Architectural Coating	Architectural Coating	3/29/2013	4/4/2013	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

Fire Access Road - Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Fire Access Road - Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Fire Access Road - Site Preparation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Secondary Access Road - Site Preparation	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Secondary Access Road - Site Preparation	Forklifts	Diesel	Average	1.00	8.00	82.0	0.20
Secondary Access Road - Site Preparation	Off-Highway Trucks	Diesel	Average	1.00	8.00	376	0.38
Tasting Deck - Site Prep	Skid Steer Loaders	Diesel	Average	2.00	8.00	71.0	0.37
Tasting Deck Mod - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Tasting Deck Mod - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Tasting Deck Mod - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Fire Access Road - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Fire Access Road - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Fire Access Road - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Secondary Access Road - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Secondary Access Road - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Secondary Access Road - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37

Wine Cave - Grading	Excavators	Diesel	Average	1.00	8.00	133	0.38
Wine Cave - Grading	Skid Steer Loaders	Diesel	Average	1.00	8.00	71.0	0.37
Wine Cave - Grading	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	202	0.37
Tasting Deck - Grading	Bore/Drill Rigs	Diesel	Average	1.00	8.00	83.0	0.50
Tasting Deck Mod - Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Wine Cave - Construction	Forklifts	Diesel	Average	2.00	8.00	82.0	0.20
Wine Cave - Construction	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Wine Cave - Construction	Cement and Mortar Mixers	Diesel	Average	1.00	8.00	10.0	0.56
Tasting Deck - Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Wine Cave - Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Tasting Deck - Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Tasting Deck Mod - Grading	—	—	—	—
Tasting Deck Mod - Grading	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck Mod - Grading	Vendor	—	8.40	HHDT,MHDT
Tasting Deck Mod - Grading	Hauling	0.00	20.0	HHDT
Tasting Deck Mod - Grading	Onsite truck	—	—	HHDT
Fire Access Road - Site Preparation	—	—	—	—
Fire Access Road - Site Preparation	Worker	12.0	11.7	LDA,LDT1,LDT2

Fire Access Road - Site Preparation	Vendor	—	8.40	HHDT,MHDT
Fire Access Road - Site Preparation	Hauling	0.00	20.0	HHDT
Fire Access Road - Site Preparation	Onsite truck	0.00	0.00	HHDT
Secondary Access Road - Site Preparation	—	—	—	—
Secondary Access Road - Site Preparation	Worker	12.0	11.7	LDA,LDT1,LDT2
Secondary Access Road - Site Preparation	Vendor	—	8.40	HHDT,MHDT
Secondary Access Road - Site Preparation	Hauling	0.00	20.0	HHDT
Secondary Access Road - Site Preparation	Onsite truck	0.00	0.30	HHDT
Fire Access Road - Grading	—	—	—	—
Fire Access Road - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Fire Access Road - Grading	Vendor	3.00	8.40	HHDT,MHDT
Fire Access Road - Grading	Hauling	0.00	20.0	HHDT
Fire Access Road - Grading	Onsite truck	—	—	HHDT
Secondary Access Road - Grading	—	—	—	—
Secondary Access Road - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Secondary Access Road - Grading	Vendor	2.00	8.40	HHDT,MHDT
Secondary Access Road - Grading	Hauling	0.00	20.0	HHDT
Secondary Access Road - Grading	Onsite truck	—	—	HHDT
Wine Cave - Grading	—	—	—	—
Wine Cave - Grading	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Grading	Vendor	2.00	8.40	HHDT,MHDT
Wine Cave - Grading	Hauling	0.00	20.0	HHDT
Wine Cave - Grading	Onsite truck	12.0	0.40	HHDT
Tasting Deck Mod - Construction	—	—	—	—
Tasting Deck Mod - Construction	Worker	8.00	11.7	LDA,LDT1,LDT2

Tasting Deck Mod - Construction	Vendor	2.00	8.40	HHDT,MHDT
Tasting Deck Mod - Construction	Hauling	0.00	20.0	HHDT
Tasting Deck Mod - Construction	Onsite truck	—	—	HHDT
Wine Cave - Construction	—	—	—	—
Wine Cave - Construction	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Construction	Vendor	2.00	8.40	HHDT,MHDT
Wine Cave - Construction	Hauling	0.00	20.0	HHDT
Wine Cave - Construction	Onsite truck	—	—	HHDT
Wine Cave - Architectural Coating	—	—	—	—
Wine Cave - Architectural Coating	Worker	12.0	11.7	LDA,LDT1,LDT2
Wine Cave - Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Wine Cave - Architectural Coating	Hauling	0.00	20.0	HHDT
Wine Cave - Architectural Coating	Onsite truck	—	—	HHDT
Tasting Deck - Site Prep	—	—	—	—
Tasting Deck - Site Prep	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck - Site Prep	Vendor	—	8.40	HHDT,MHDT
Tasting Deck - Site Prep	Hauling	0.00	20.0	HHDT
Tasting Deck - Site Prep	Onsite truck	—	—	HHDT
Tasting Deck - Construction	—	—	—	—
Tasting Deck - Construction	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck - Construction	Vendor	2.00	8.40	HHDT,MHDT
Tasting Deck - Construction	Hauling	0.00	20.0	HHDT
Tasting Deck - Construction	Onsite truck	—	—	HHDT
Tasting Deck - Architectural Coating	—	—	—	—
Tasting Deck - Architectural Coating	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck - Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Tasting Deck - Architectural Coating	Hauling	0.00	20.0	HHDT
Tasting Deck - Architectural Coating	Onsite truck	—	—	HHDT

Tasting Deck - Grading	—	—	—	—
Tasting Deck - Grading	Worker	8.00	11.7	LDA,LDT1,LDT2
Tasting Deck - Grading	Vendor	—	8.40	HHDT,MHDT
Tasting Deck - Grading	Hauling	0.00	20.0	HHDT
Tasting Deck - Grading	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Wine Cave - Architectural Coating	0.00	0.00	3,688	1,229	1,237
Tasting Deck - Architectural Coating	0.00	0.00	2,012	671	675

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)
Fire Access Road - Site Preparation	—	403	0.00	0.00	—
Secondary Access Road - Site Preparation	—	1,411	0.00	0.00	—
Tasting Deck - Site Prep	—	—	0.00	0.00	—
Tasting Deck Mod - Grading	132	—	0.00	0.00	—
Fire Access Road - Grading	483	—	0.00	0.00	—

Secondary Access Road - Grading	349	—	0.00	0.00	—
Wine Cave - Grading	—	1,411	0.00	0.00	—
Tasting Deck - Grading	—	—	0.00	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Quality Restaurant	0.00	0%
Other Non-Asphalt Surfaces	0.06	0%
User Defined Recreational	0.00	0%
Other Non-Asphalt Surfaces	0.45	0%
Other Non-Asphalt Surfaces	0.22	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	204	0.03	< 0.005
2013	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	119	119	119	43,435	2,192	2,192	2,192	800,243

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	5,700	1,900	1,912

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Quality Restaurant	7,800	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
User Defined Recreational	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
Other Non-Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Quality Restaurant	75,000	281,939
Other Non-Asphalt Surfaces	0.00	0.00
User Defined Recreational	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Quality Restaurant	7.80	—
Other Non-Asphalt Surfaces	0.00	—
User Defined Recreational	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	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
Quality Restaurant	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Quality Restaurant	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Quality Restaurant	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

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	13.4	annual days of extreme heat
Extreme Precipitation	9.65	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	8.65	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	3	0	0	N/A
Sea Level Rise	1	0	0	N/A

Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	17.6
AQ-PM	9.50
AQ-DPM	6.85
Drinking Water	31.1
Lead Risk Housing	20.8
Pesticides	35.5
Toxic Releases	54.8
Traffic	14.3
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	74.8
Haz Waste Facilities/Generators	50.1
Impaired Water Bodies	43.8
Solid Waste	2.52
Sensitive Population	—
Asthma	1.27
Cardio-vascular	6.93
Low Birth Weights	30.6
Socioeconomic Factor Indicators	—
Education	5.50
Housing	3.27
Linguistic	39.2
Poverty	3.07
Unemployment	14.4

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	98.94777364
Employed	52.68831002
Median HI	99.79468754
Education	—
Bachelor's or higher	98.52431669
High school enrollment	100
Preschool enrollment	95.7141024
Transportation	—
Auto Access	76.73553189
Active commuting	1.039394328
Social	—
2-parent households	77.95457462
Voting	90.91492365
Neighborhood	—
Alcohol availability	74.05363788
Park access	27.97382266
Retail density	12.03644296
Supermarket access	25.88220198
Tree canopy	96.25304761
Housing	—
Homeownership	94.09726678
Housing habitability	95.0468369
Low-inc homeowner severe housing cost burden	88.95162325
Low-inc renter severe housing cost burden	73.93814962

Uncrowded housing	88.2586937
Health Outcomes	—
Insured adults	99.42255871
Arthritis	0.0
Asthma ER Admissions	96.6
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	97.9
Cognitively Disabled	90.0
Physically Disabled	96.1
Heart Attack ER Admissions	87.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	57.4
SLR Inundation Area	0.0

Children	97.0
Elderly	16.8
English Speaking	65.2
Foreign-born	81.3
Outdoor Workers	91.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	89.4
Traffic Density	8.4
Traffic Access	23.0
Other Indices	—
Hardship	1.5
Other Decision Support	—
2016 Voting	91.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	2.00
Healthy Places Index Score for Project Location (b)	99.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Wine cave is 2600 sq ft/0.059 acres
Construction: Construction Phases	Schedule per project plans.
Construction: Off-Road Equipment	Assumed 8 hours/day for all equipment per construction plans. Equipment provided by HFV
Operations: Energy Use	Operational electricity consumption provided by HFV
Operations: Water and Waste Water	Indoor water usage provided by HFV
Operations: Solid Waste	6 cy waste per week provided by HFV. Assumes 50 lb/cy
Construction: Trips and VMT	Number of workers and truck trips provided by HFV. Onsite trip distance for each project feature measured along road from furthest point to onsite quarry