

GHG CONSTRUCTION EMISSIONS

ATTACHMENT C

to the
Vallejo Mill Historical Park Pickleball Courts and Dog Park Project
Initial Study / Mitigated Negative Declaration

Vallejo Mill Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Vallejo Mill
Construction Start Date	9/1/2024
Operational Year	2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	24.2
Location	37.57788700331197, -121.97100040116041
County	Alameda
City	Fremont
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1628
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
City Park	3.60	Acre	3.60	0.00	26,000	26,000	—	—

Parking Lot	23.0	Space	0.21	0.00	0.00	—	—	—
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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.	4.41	3.71	36.0	33.7	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,450	5,450	0.22	0.14	2.00	5,471
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.71	5.65	54.3	52.9	0.08	2.44	27.0	29.4	2.24	13.6	15.8	—	8,520	8,520	0.34	0.08	0.03	8,552
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.54	0.46	4.39	4.14	0.01	0.19	1.54	1.73	0.18	0.76	0.93	—	697	697	0.03	0.01	0.08	701
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.10	0.08	0.80	0.75	< 0.005	0.04	0.28	0.32	0.03	0.14	0.17	—	115	115	< 0.005	< 0.005	0.01	116

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	4.41	3.71	36.0	33.7	0.05	1.60	19.8	21.4	1.47	10.1	11.6	—	5,450	5,450	0.22	0.14	2.00	5,471
2025	0.96	0.82	6.56	9.61	0.01	0.29	0.17	0.45	0.26	0.04	0.30	—	1,524	1,524	0.06	0.02	0.69	1,531
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.71	5.65	54.3	52.9	0.08	2.44	27.0	29.4	2.24	13.6	15.8	—	8,520	8,520	0.34	0.08	0.03	8,552
2025	0.95	0.81	6.58	9.52	0.01	0.29	0.17	0.45	0.26	0.04	0.30	—	1,511	1,511	0.06	0.02	0.02	1,518
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.54	0.46	4.39	4.14	0.01	0.19	1.54	1.73	0.18	0.76	0.93	—	697	697	0.03	0.01	0.08	701
2025	0.10	0.09	0.72	1.04	< 0.005	0.03	0.02	0.05	0.03	< 0.005	0.03	—	166	166	0.01	< 0.005	0.03	167
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.10	0.08	0.80	0.75	< 0.005	0.04	0.28	0.32	0.03	0.14	0.17	—	115	115	< 0.005	< 0.005	0.01	116
2025	0.02	0.02	0.13	0.19	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	27.4	27.4	< 0.005	< 0.005	0.01	27.6

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	9/1/2024	9/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	9/30/2024	10/25/2024	5.00	20.0	—
Grading	Grading	10/8/2024	11/4/2024	5.00	20.0	—
Paving	Paving	9/8/2025	10/31/2025	5.00	40.0	—

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
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Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	9.10	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	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)
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