

**PRC 421 Decommissioning
Phase 1A: Caisson Internal Materials Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	2	550	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.223	0.021	0.007	0.006	0.142	66.535	0.003	0.002
Wheeled loader (Caterpillar 950)	Diesel	250	2	550	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.333	0.030	0.011	0.010	0.143	57.724	0.003	0.002
Dozer (Caterpillar D6)	Diesel	215	0	0	0.00417	0.00041	0.00023	0.00020	0.00314	0.49930	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Welding machine	Diesel	25	1	40	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.002	0.000	0.000	0.000	0.001	0.282	0.000	0.000
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
													0.558	0.051	0.019	0.016	0.287	124.540	0.0066	0.0032

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	2200	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0050	0.0007	0.0001	0.0001	0.0515	15.7676	0.0002	0.0003
Heavy-duty truck (vacuum truck)	20	4	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0001	0.0000	0.0000	0.0000	0.0000	0.1268	0.0000	0.0000
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	400	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0364	0.0006	0.0001	0.0001	0.0027	17.3952	0.0000	0.0013
Heavy-duty truck (export soil/gravel)	14	350	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0069	0.0001	0.0001	0.0001	0.0006	7.7657	0.0000	0.0008
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Totals =>											0.0484	0.0014	0.0002	0.0002	0.0547	41.1	0.0002	0.0025

Off-Road & On-Road Source Totals 0.606 0.053 0.019 0.016 0.341 165.6 0.0068 0.0057

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 20 workers and other on-site staff (40 one-way trips/day)
- ⁴ Based on 400 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 8000 miles)

Greenhouse Gas Emissions Summary

Metric Tons	147.853	0.006	0.005
CO2E	147.853	0.171	1.338
Total CO2E			149.4

**PRC 421 Decommissioning
Phase 1B: Well Abandonment**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	1	40	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.008	0.001	0.000	0.000	0.005	2.419	0.000	0.000			
Wheeled loader (Caterpillar 950)	Diesel	250	0	0	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Dozer (Caterpillar D6)	Diesel	215	0	0	0.00417	0.00041	0.00023	0.00020	0.00314	0.49930	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Welding machine	Diesel	25	1	8	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.056	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Crane	Diesel	275	1	40	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.015	0.001	0.001	0.000	0.006	1.843	0.000	0.000			
													0.023	0.002	0.001	0.001	0.012	4.319	0.0003	0.0001			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	96	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0002	0.0000	0.0000	0.0000	0.0022	0.6880	0.0000	0.0000			
Heavy-duty truck (vacuum truck)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Totals =>											0.0002	0.0000	0.0000	0.0000	0.0022	0.7	0.0000	0.0000			

Off-Road & On-Road Source Totals **0.024** **0.002** **0.001** **0.001** **0.014** **5.0** **0.0003** **0.0001**

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 12 workers and other on-site staff (24 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	4.470	0.000	0.000
CO2E	4.470	0.007	0.032
Total CO2E			4.5

**PRC 421 Decommissioning
Phase 1C: Caisson Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	4	400	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.324	0.030	0.011	0.009	0.207	96.778	0.005	0.002
Wheeled loader (Caterpillar 950)	Diesel	250	2	400	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.242	0.022	0.008	0.007	0.104	41.981	0.002	0.001
Dozer (Caterpillar D6)	Diesel	215	0	0	0.00417	0.00041	0.00023	0.00020	0.00314	0.49930	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Crane	Diesel	275	2	400	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.295	0.025	0.012	0.010	0.123	36.859	0.003	0.001
													0.861	0.078	0.031	0.026	0.434	175.617	0.0098	0.0047

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	2000	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0045	0.0007	0.0001	0.0000	0.0468	14.3342	0.0002	0.0003
Heavy-duty truck (vacuum truck)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export concrete)	54	480	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0366	0.0005	0.0005	0.0004	0.0029	41.0789	0.0000	0.0043
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (wastewater disposal)	60	90	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0076	0.0001	0.0001	0.0001	0.0006	8.5581	0.0000	0.0009
Totals =>											0.0487	0.0013	0.0006	0.0006	0.0503	64.0	0.0002	0.0055

Off-Road & On-Road Source Totals 0.910 0.079 0.032 0.026 0.484 239.6 0.0101 0.0102

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 25 workers and other on-site staff (50 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	213.918	0.009	0.009
CO2E	213.918	0.251	2.410
Total CO2E			216.6

**PRC 421 Decommissioning
Phase 1D: Pier Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	2	110	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.045	0.004	0.001	0.001	0.028	13.307	0.001	0.000			
Wheeled loader (Caterpillar 950)	Diesel	250	2	110	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.067	0.006	0.002	0.002	0.029	11.545	0.001	0.000			
Dozer (Caterpillar D6)	Diesel	215	0	0	0.00417	0.00041	0.00023	0.00020	0.00314	0.49930	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Crane	Diesel	275	2	110	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.081	0.007	0.003	0.003	0.034	10.136	0.001	0.000			
													0.192	0.017	0.007	0.006	0.091	34.988	0.0020	0.0010			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	286	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0006	0.0001	0.0000	0.0000	0.0067	2.0498	0.0000	0.0000			
Heavy-duty truck (vacuum truck)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export steel)	50	60	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0042	0.0001	0.0001	0.0001	0.0003	4.7545	0.0000	0.0005			
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export wood)	14	14	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0003	0.0000	0.0000	0.0000	0.0000	0.3106	0.0000	0.0000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Totals =>											0.0052	0.0002	0.0001	0.0001	0.0071	7.1	0.0000	0.0006			

Off-Road & On-Road Source Totals 0.197 0.017 0.007 0.006 0.098 42.1 0.0020 0.0015

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 13 workers and other on-site staff (26 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	37.592	0.002	0.001
CO2E	37.592	0.051	0.364
Total CO2E			38.0

**PRC 421 Decommissioning
Phase 1E: Pipeline Abandonment**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	0	0	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wheeled loader (Caterpillar 950)	Diesel	250	0	0	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Concrete pump	Diesel	175	1	50	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.009	0.001	0.000	0.000	0.009	1.507	0.000	0.000
Backhoe	Diesel	104	1	50	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.006	0.001	0.000	0.000	0.007	1.118	0.000	0.000
Welding machine	Diesel	25	1	20	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.001	0.000	0.000	0.000	0.001	0.141	0.000	0.000
Flush pump	Diesel	20	1	50	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.004	0.001	0.000	0.000	0.003	0.463	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
													0.020	0.002	0.001	0.001	0.020	3.230	0.0002	0.0001

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	900	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0020	0.0003	0.0000	0.0000	0.0211	6.4504	0.0001	0.0001
Heavy-duty truck (water, cement & vacuum trucks)	20	15	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0004	0.0000	0.0000	0.0000	0.0000	0.4755	0.0000	0.0000
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (wastewater disposal)	60	6	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0005	0.0000	0.0000	0.0000	0.0000	0.5705	0.0000	0.0001
Totals =>											0.0030	0.0003	0.0000	0.0000	0.0211	7.5	0.0001	0.0003

Off-Road & On-Road Source Totals 0.023 0.002 0.001 0.001 0.041 10.7 0.0003 0.0003

Notes:
¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
³ Based on 15 workers and other on-site staff (30 one-way trips/day)
⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	9.577	0.000	0.000
CO2E	9.577	0.007	0.080
Total CO2E			9.7

**PRC 421 Decommissioning
Phase 1F: Site Restoration**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	1	30	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.006	0.001	0.000	0.000	0.004	1.815	0.000	0.000			
Wheeled loader (Caterpillar 950)	Diesel	250	0	0	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Backhoe	Diesel	104	1	30	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.004	0.000	0.000	0.000	0.004	0.671	0.000	0.000			
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Crane	Diesel	275	1	30	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.011	0.001	0.000	0.000	0.005	1.382	0.000	0.000			
													0.021	0.002	0.001	0.001	0.013	3.868	0.0002	0.0001			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	78	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0002	0.0000	0.0000	0.0000	0.0018	0.5590	0.0000	0.0000			
Heavy-duty truck (bin removal, hydroseeder)	20	10	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0003	0.0000	0.0000	0.0000	0.0000	0.3170	0.0000	0.0000			
Heavy-duty truck (hydro-excavator, on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Totals =>											0.0005	0.0000	0.0000	0.0000	0.0018	0.9	0.0000	0.0000			

Off-Road & On-Road Source Totals 0.021 0.002 0.001 0.001 0.015 4.7 0.0002 0.0002

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 13 workers and other on-site staff (26 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	4.235	0.000	0.000
CO2E	4.235	0.006	0.036
Total CO2E			4.3

**PRC 421 Decommissioning
Phase 2A: Pipeline Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	1	50	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.010	0.001	0.000	0.000	0.006	3.024	0.000	0.000
Wheeled loader (Caterpillar 950)	Diesel	250	0	0	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Backhoe	Diesel	104	1	50	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.006	0.001	0.000	0.000	0.007	1.118	0.000	0.000
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
													0.016	0.002	0.001	0.001	0.014	4.142	0.0002	0.0001

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	140	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0003	0.0000	0.0000	0.0000	0.0033	1.0034	0.0000	0.0000
Heavy-duty truck (bin removal, hydroseeder)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (hydro-excavator, on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export steel)	50	12	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0008	0.0000	0.0000	0.0000	0.0001	0.9509	0.0000	0.0001
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Totals =>											0.0012	0.0001	0.0000	0.0000	0.0033	2.0	0.0000	0.0001

Off-Road & On-Road Source Totals 0.017 0.002 0.001 0.001 0.017 6.1 0.0002 0.0002

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 14 workers and other on-site staff (28 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	5.444	0.000	0.000
CO2E	5.444	0.006	0.053
Total CO2E			5.5

**PRC 421 Decommissioning
Phase 2B: Rock Revetment and Access Roadway Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	2	300	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.122	0.011	0.004	0.003	0.078	36.292	0.002	0.001
Wheeled loader (Caterpillar 950)	Diesel	250	2	300	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.182	0.017	0.006	0.005	0.078	31.486	0.002	0.001
Dozer (Caterpillar D6)	Diesel	215	1	300	0.00417	0.00041	0.00023	0.00021	0.00314	0.49934	0.000023	0.000011	0.134	0.013	0.007	0.007	0.101	16.104	0.001	0.000
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
													0.438	0.041	0.017	0.015	0.257	83.881	0.0043	0.0021

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	1080	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0024	0.0004	0.0000	0.0000	0.0253	7.7405	0.0001	0.0002
Heavy-duty truck (bin removal, hydroseeder)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export soil/gravel)	14	600	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0119	0.0002	0.0001	0.0001	0.0009	13.3126	0.0000	0.0014
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Heavy-duty truck (export rock)	50	666	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0470	0.0007	0.0006	0.0006	0.0038	52.7750	0.0000	0.0055
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Totals =>											0.0613	0.0012	0.0008	0.0007	0.0300	73.8	0.0001	0.0070

Off-Road & On-Road Source Totals 0.499 0.042 0.018 0.016 0.287 157.7 0.0045 0.0091

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 18 workers and other on-site staff (36 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	140.812	0.004	0.008
CO2E	140.812	0.112	2.159
Total CO2E			143.1

**PRC 421 Decommissioning
Phase 2C: Wooden Seawall and Associated Structures and Buried Debris Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	2	150	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.061	0.006	0.002	0.002	0.039	18.146	0.001	0.000			
Wheeled loader (Caterpillar 950)	Diesel	250	1	150	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.045	0.004	0.002	0.001	0.020	7.871	0.000	0.000			
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Backhoe	Diesel	104	1	150	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.018	0.002	0.001	0.001	0.022	3.354	0.000	0.000			
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Chain saw	Gasoline	6.5	2	150	0.00010	0.01634	0.00329	0.00320	0.90255	0.92733	0.000023	0.000011	0.000	0.016	0.003	0.003	0.880	0.904	0.000	0.000			
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
													0.125	0.028	0.008	0.007	0.961	30.276	0.0016	0.0008			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	540	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0012	0.0002	0.0000	0.0000	0.0126	3.8702	0.0001	0.0001			
Heavy-duty truck (bin removal, hydroseeder)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (hydro-excavator, on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export wood)	14	10	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0002	0.0000	0.0000	0.0000	0.0000	0.2219	0.0000	0.0000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Totals =>											0.0014	0.0002	0.0000	0.0000	0.0127	4.1	0.0001	0.0001			

Off-Road & On-Road Source Totals 0.126 0.028 0.008 0.007 0.973 34.4 0.0016 0.0009

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 18 workers and other on-site staff (36 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	30.686	0.001	0.001
CO2E	30.686	0.041	0.204
Total CO2E			30.9

**PRC 421 Decommissioning
Phase 2D: Pier Abutment Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total English Tons										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	1	100	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	0.020	0.002	0.001	0.001	0.013	6.049	0.000	0.000			
Wheeled loader (Caterpillar 950)	Diesel	250	1	100	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	0.030	0.003	0.001	0.001	0.013	5.248	0.000	0.000			
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000			
													0.051	0.005	0.002	0.001	0.026	11.296	0.0006	0.0003			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total English Tons										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	320	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.0007	0.0001	0.0000	0.0000	0.0075	2.2935	0.0000	0.0001			
Heavy-duty truck (bin removal, hydroseeder)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (hydro-excavator, on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export steel)	50	10	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0007	0.0000	0.0000	0.0000	0.0001	0.7924	0.0000	0.0001			
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (export wood)	14	2	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0444	0.0000	0.0000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Totals =>											0.0015	0.0001	0.0000	0.0000	0.0075	3.1	0.0000	0.0001			

Off-Road & On-Road Source Totals 0.052 0.005 0.002 0.001 0.033 14.4 0.0006 0.0004

Notes:

- ¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- ² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- ³ Based on 16 workers and other on-site staff (32 one-way trips/day)
- ⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Greenhouse Gas Emissions Summary

Metric Tons	12.881	0.001	0.000
CO2E	12.881	0.016	0.101
Total CO2E			13.0

**PRC 421 Decommissioning
Air Pollutant and Greenhouse Gas Emissions Totals**

Task/Area	Air Pollutants: Total English Tons					GHG: Total Metric Tons			
	NOx	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	CO2E
Phase 1A: Caisson Internal Materials Removal	0.606	0.053	0.019	0.016	0.341	147.9	0.006	0.005	149.4
Phase 1B: Well Abandonment	0.024	0.002	0.001	0.001	0.014	4.5	0.000	0.000	4.5
Phase 1C: Caisson Removal	0.910	0.079	0.032	0.026	0.484	213.9	0.009	0.009	216.6
Phase 1D: Pier Removal	0.197	0.017	0.007	0.006	0.098	37.6	0.002	0.001	38.0
Phase 1E: Pipeline Abandonment	0.023	0.002	0.001	0.001	0.041	9.6	0.000	0.000	9.7
Phase 1F: Site Restoration	0.021	0.002	0.001	0.001	0.01	4.2	0.000	0.000	4.3
Phase 2A: Pipeline Removal	0.017	0.002	0.001	0.001	0.017	5.4	0.000	0.000	5.5
Phase 2B: Rock Revetment and Access Roadway Removal	0.499	0.042	0.018	0.016	0.287	140.8	0.004	0.008	143.1
Phase 2C: Wooden Seawall and Associated Structures and Buried Debris Removal	0.126	0.028	0.008	0.007	0.973	30.7	0.001	0.001	30.9
Phase 2D: Pier Abutment Removal	0.052	0.005	0.002	0.001	0.033	12.9	0.001	0.000	13.0
Total	2.48	0.23	0.09	0.08	2.30	607.5	0.024	0.026	614.9

12-Month Totals	Air Pollutants: Total English Tons					GHG: Total Metric Tons			
Component 1: Phases 1A through 1F	1.78	0.16	0.06	0.05	0.99	417.6	0.018	0.016	422.4
Component 2: Phases 2A through 2D	0.69	0.08	0.03	0.02	1.31	189.8	0.006	0.009	192.5
SBAPCD Rule 202 Threshold	25	25	25	25	NA	-	-	-	-
SBAPCD Stationary Source Threshold									10000

Peak Day: All Emissions	Pounds/Peak Day				
Phase 1C: Caisson Removal	48.0	4.0	1.6	1.3	24.4
Phase 2B: Rock Revetment and Access Roadway Removal	33.5	2.8	1.2	1.1	19.1
SBCAPCD Threshold	240	240	80	NA	NA

Peak Day: Motor Vehicle Emissions	Pounds/Peak Day				
Phase 1C: Caisson Removal	5.0	0.1	0.1	0.1	2.7
Phase 2B: Rock Revetment and Access Roadway Removal	4.3	0.1	0.1	0.1	2.0
SBCAPCD Threshold	25	25	NA	NA	NA

**PRC 421 Decommissioning
Phase 1C: Caisson Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Hours/Day per Source	Emission Factors: pounds/BHP-hr ¹								Pounds										
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Excavator (Caterpillar 330)	Diesel	272	4	10	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	16.2	1.5	0.5	0.4	10.3	4838.9	0.250	0.120			
Wheeled loader (Caterpillar 950)	Diesel	250	2	10	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	12.1	1.1	0.4	0.4	5.2	2099.1	0.115	0.055			
Dozer (Caterpillar D6)	Diesel	215	0	0	0.00417	0.00041	0.00023	0.00020	0.00314	0.49930	0.000023	0.000011	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Crane	Diesel	275	2	10	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	14.7	1.3	0.6	0.5	6.2	1842.9	0.127	0.061			
													43.1	3.9	1.5	1.3	21.7	8780.9	0.492	0.235			

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Peak Day One-Way Trips	Emission Factors, grams/mile ²								Total Pounds										
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) ³	20	50	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.2	0.0	0.0	0.0	2.3	716.7	0.010	0.016			
Heavy-duty truck (vacuum truck)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (export soil/gravel)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (export concrete)	54	20	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	3.1	0.0	0.0	0.0	0.2	3423.2	0.002	0.356			
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (export rock)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.0	0.0	0.0	0.0	0.0	0.0	0.000	0.000			
Heavy-duty truck (wastewater disposal)	60	10	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	1.7	0.0	0.0	0.0	0.1	1901.8	0.001	0.198			
Totals =>											5.0	0.1	0.1	0.1	2.7	6041.8	0.013	0.570			

Off-Road & On-Road Source Totals 48.0 4.0 1.6 1.3 24.4 14822.6 0.505 0.805

Notes:

¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County

² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions

³ Based on 25 workers and other on-site staff (50 one-way trips/day)

⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

**PRC 421 Decommissioning
Phase 2B: Rock Revetment and Access Roadway Removal**

OFF-ROAD SOURCES

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr ¹								Total Pounds							
					NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Excavator (Caterpillar 330)	Diesel	272	2	10	0.00149	0.00014	0.00005	0.00004	0.00095	0.44475	0.000023	0.000011	8.11	0.76	0.27	0.22	5.17	2419.4	0.125	0.060
Wheeled loader (Caterpillar 950)	Diesel	250	2	10	0.00242	0.00022	0.00008	0.00007	0.00104	0.41981	0.000023	0.000011	12.10	1.10	0.40	0.35	5.20	2099.1	0.115	0.055
Dozer (Caterpillar D6)	Diesel	215	1	10	0.00417	0.00041	0.00023	0.00021	0.00314	0.49934	0.000023	0.000011	8.97	0.88	0.49	0.45	6.75	1073.6	0.049	0.024
Concrete pump	Diesel	175	0	0	0.00202	0.00016	0.00011	0.00009	0.00209	0.34452	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Backhoe	Diesel	104	0	0	0.00235	0.00023	0.00014	0.00011	0.00288	0.43005	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Welding machine	Diesel	25	0	0	0.00447	0.00061	0.00021	0.00019	0.00285	0.56383	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Flush pump	Diesel	20	0	0	0.00735	0.00100	0.00035	0.00032	0.00500	0.92681	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Air compressor	Diesel	20	0	0	0.00734	0.00092	0.00033	0.00030	0.00479	0.92733	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Crane	Diesel	275	0	0	0.00268	0.00023	0.00011	0.00009	0.00112	0.33508	0.000023	0.000011	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
													29.17	2.74	1.17	1.02	17.12	5592.1	0.290	0.138

ON-ROAD SOURCES

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile ²								Total Pounds							
			NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO _x	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) ³	20	36	0.10250	0.01498	0.00121	0.00111	1.06130	325.0990	0.00439	0.00720	0.16	0.02	0.00	0.00	1.68	516.0	0.007	0.011
Heavy-duty truck (bin removal, hydroseeder)	20	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Heavy-duty truck (hydro-excavator; on-site use) ⁴	20	0	4.13121	0.06330	0.00920	0.00880	0.30751	1972.6210	0.00088	0.14961	0.00	0.00	0.00	0.00	0.0	0.000	0.000	
Heavy-duty truck (export soil/gravel)	14	20	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.79	0.01	0.01	0.01	0.06	887.5	0.001	0.092
Heavy-duty truck (export steel)	50	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Heavy-duty truck (export concrete)	54	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Heavy-duty truck (export wood)	14	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Heavy-duty truck (export rock)	50	24	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	3.39	0.05	0.04	0.04	0.27	3803.6	0.002	0.396
Heavy-duty truck (wastewater disposal)	60	0	1.28113	0.01901	0.01607	0.01537	0.10224	1437.7630	0.00088	0.14961	0.00	0.00	0.00	0.00	0.00	0.0	0.000	0.000
Totals =>											4.34	0.09	0.05	0.05	2.02	5207.1	0.010	0.500

Off-Road & On-Road Source Totals 33.5 2.8 1.2 1.1 19.1 10799.2 0.299 0.638

Notes:

¹ Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County

² Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions

³ Based on 18 workers and other on-site staff (36 one-way trips/day)

⁴ Based on 32 hours total pump use, 20 mph emission factors for engine (pump PTO) use on-site (equivalent to 640 miles)

Chain Saw Emissions: two stroke

ARB Small Off-road Engine Standards for 2008+ (80-225 cc)

Pollutant	g/KW-hr	lb/BHP-hr
HC+NOx	10	0.01644
CO	549	0.90255
PM	2	0.00329
TOG*		0.01634
NOx*		0.00010

*Based on 99.4% TOG for two stroke engines (Pleasurecraft Inventory)