

**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 <sup>1</sup>								Total English Tons							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>0.558</b>	<b>0.051</b>	<b>0.019</b>	<b>0.016</b>	<b>0.287</b>	<b>124.540</b>	<b>0.0066</b>	<b>0.0032</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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
<b>Totals =&gt;</b>											<b>0.0484</b>	<b>0.0014</b>	<b>0.0002</b>	<b>0.0002</b>	<b>0.0547</b>	<b>41.1</b>	<b>0.0002</b>	<b>0.0025</b>

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 20 workers and other on-site staff (40 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	147.853	0.006	0.005
<b>CO2E</b>	147.853	0.171	1.338
<b>Total CO2E</b>			<b>149.4</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>0.023</b>	<b>0.002</b>	<b>0.001</b>	<b>0.001</b>	<b>0.012</b>	<b>4.319</b>	<b>0.0003</b>	<b>0.0001</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0022</b>	<b>0.7</b>	<b>0.0000</b>	<b>0.0000</b>			

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 12 workers and other on-site staff (24 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	4.470	0.000	0.000
<b>CO2E</b>	4.470	0.007	0.032
<b>Total CO2E</b>			<b>4.5</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>0.861</b>	<b>0.078</b>	<b>0.031</b>	<b>0.026</b>	<b>0.434</b>	<b>175.617</b>	<b>0.0098</b>	<b>0.0047</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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
<b>Totals =&gt;</b>											<b>0.0487</b>	<b>0.0013</b>	<b>0.0006</b>	<b>0.0006</b>	<b>0.0503</b>	<b>64.0</b>	<b>0.0002</b>	<b>0.0055</b>

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

Notes:

<sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County

<sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions

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

<sup>4</sup> 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**

<b>Metric Tons</b>	213.918	0.009	0.009
<b>CO2E</b>	213.918	0.251	2.410
<b>Total CO2E</b>			<b>216.6</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>0.192</b>	<b>0.017</b>	<b>0.007</b>	<b>0.006</b>	<b>0.091</b>	<b>34.988</b>	<b>0.0020</b>	<b>0.0010</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>0.0052</b>	<b>0.0002</b>	<b>0.0001</b>	<b>0.0001</b>	<b>0.0071</b>	<b>7.1</b>	<b>0.0000</b>	<b>0.0006</b>			

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 13 workers and other on-site staff (26 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	37.592	0.002	0.001
<b>CO2E</b>	37.592	0.051	0.364
<b>Total CO2E</b>			<b>38.0</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>0.020</b>	<b>0.002</b>	<b>0.001</b>	<b>0.001</b>	<b>0.020</b>	<b>3.230</b>	<b>0.0002</b>	<b>0.0001</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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	0.5705	0.0000	0.0001	
<b>Totals =&gt;</b>											<b>0.0030</b>	<b>0.0003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0211</b>	<b>7.5</b>	<b>0.0001</b>	<b>0.0003</b>

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

Notes:  
<sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County  
<sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions  
<sup>3</sup> Based on 15 workers and other on-site staff (30 one-way trips/day)  
<sup>4</sup> 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**

<b>Metric Tons</b>	9.577	0.000	0.000
<b>CO2E</b>	9.577	0.007	0.080
<b>Total CO2E</b>			<b>9.7</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>0.021</b>	<b>0.002</b>	<b>0.001</b>	<b>0.001</b>	<b>0.013</b>	<b>3.868</b>	<b>0.0002</b>	<b>0.0001</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>0.0005</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0018</b>	<b>0.9</b>	<b>0.0000</b>	<b>0.0000</b>			

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 13 workers and other on-site staff (26 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	4.235	0.000	0.000
<b>CO2E</b>	4.235	0.006	0.036
<b>Total CO2E</b>			<b>4.3</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>0.016</b>	<b>0.002</b>	<b>0.001</b>	<b>0.001</b>	<b>0.014</b>	<b>4.142</b>	<b>0.0002</b>	<b>0.0001</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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
<b>Totals =&gt;</b>											<b>0.0012</b>	<b>0.0001</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0033</b>	<b>2.0</b>	<b>0.0000</b>	<b>0.0001</b>

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 14 workers and other on-site staff (28 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	5.444	0.000	0.000
<b>CO2E</b>	5.444	0.006	0.053
<b>Total CO2E</b>			<b>5.5</b>

**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 <sup>1</sup>								Total English Tons							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>0.438</b>	<b>0.041</b>	<b>0.017</b>	<b>0.015</b>	<b>0.257</b>	<b>83.881</b>	<b>0.0043</b>	<b>0.0021</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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
<b>Totals =&gt;</b>											<b>0.0613</b>	<b>0.0012</b>	<b>0.0008</b>	<b>0.0007</b>	<b>0.0300</b>	<b>73.8</b>	<b>0.0001</b>	<b>0.0070</b>

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 18 workers and other on-site staff (36 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	140.812	0.004	0.008
<b>CO2E</b>	140.812	0.112	2.159
<b>Total CO2E</b>			<b>143.1</b>



**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 <sup>1</sup>								Total English Tons										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>0.125</b>	<b>0.028</b>	<b>0.008</b>	<b>0.007</b>	<b>0.961</b>	<b>30.276</b>	<b>0.0016</b>	<b>0.0008</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>0.0014</b>	<b>0.0002</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0127</b>	<b>4.1</b>	<b>0.0001</b>	<b>0.0001</b>			

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 18 workers and other on-site staff (36 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	30.686	0.001	0.001
<b>CO2E</b>	30.686	0.041	0.204
<b>Total CO2E</b>			<b>30.9</b>

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

**OFF-ROAD SOURCES**

Source	Fuel	BHP	Number	Total Hours per Source	Emission Factors: pounds/BHP-hr <sup>1</sup>								Total English Tons										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>0.051</b>	<b>0.005</b>	<b>0.002</b>	<b>0.001</b>	<b>0.026</b>	<b>11.296</b>	<b>0.0006</b>	<b>0.0003</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total English Tons										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>0.0015</b>	<b>0.0001</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0075</b>	<b>3.1</b>	<b>0.0000</b>	<b>0.0001</b>			

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

Notes:

- <sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County
- <sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions
- <sup>3</sup> Based on 16 workers and other on-site staff (32 one-way trips/day)
- <sup>4</sup> 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**

<b>Metric Tons</b>	12.881	0.001	0.000
<b>CO2E</b>	12.881	0.016	0.101
<b>Total CO2E</b>			<b>13.0</b>

**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
<b>Total</b>	<b>2.48</b>	<b>0.23</b>	<b>0.09</b>	<b>0.08</b>	<b>2.30</b>	<b>607.5</b>	<b>0.024</b>	<b>0.026</b>	<b>614.9</b>

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 <sup>1</sup>								Pounds										
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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			
													<b>43.1</b>	<b>3.9</b>	<b>1.5</b>	<b>1.3</b>	<b>21.7</b>	<b>8780.9</b>	<b>0.492</b>	<b>0.235</b>			

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Peak Day One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total Pounds										
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O			
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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			
<b>Totals =&gt;</b>											<b>5.0</b>	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	<b>2.7</b>	<b>6041.8</b>	<b>0.013</b>	<b>0.570</b>			

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

Notes:

<sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County

<sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions

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

<sup>4</sup> 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 <sup>1</sup>								Total Pounds							
					NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	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
													<b>29.17</b>	<b>2.74</b>	<b>1.17</b>	<b>1.02</b>	<b>17.12</b>	<b>5592.1</b>	<b>0.290</b>	<b>0.138</b>

**ON-ROAD SOURCES**

On Road Sources	Miles/One-way Trip	Total One-Way Trips	Emission Factors, grams/mile <sup>2</sup>								Total Pounds							
			NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O	NO <sub>x</sub>	ROG	PM10	PM2.5	CO	CO2	CH4	N2O
Light-duty truck (workers) <sup>3</sup>	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) <sup>4</sup>	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
<b>Totals =&gt;</b>											<b>4.34</b>	<b>0.09</b>	<b>0.05</b>	<b>0.05</b>	<b>2.02</b>	<b>5207.1</b>	<b>0.010</b>	<b>0.500</b>

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

Notes:

<sup>1</sup> Emission factors from OFFROAD 2017 (ver 1.0.1) for Santa Barbara County

<sup>2</sup> Emission factors from EMFAC 2021 for Santa Barbara County year 2022 annual emissions

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

<sup>4</sup> 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)