

**Detailed 2019 DRAFT Emissions Inventory
for the Arvin Lamont Community
(Emissions in tons per year)¹**

Source Categories	CO	NOX	TOG	ROG [†]	NH3	SOX	PM	PM10	PM2.5	DPM
Stationary Point²										
Fuel Combustion										
Electric Utilities	0.02	0.07	0.004	0.004	-	0.0001	0.001	0.001	0.001	0.001
Cogeneration	3.66	2.50	22.43	2.09	3.57	0.93	1.90	1.89	1.88	-
Oil and Gas Production (Combustion)	-	-	-	-	-	-	-	-	-	-
Petroleum Refining (Combustion)	25.82	46.80	18.43	7.98	-	1.97	13.36	13.36	13.36	-
Manufacturing and Industrial	0.23	1.12	0.10	0.09	-	0.002	0.08	0.08	0.07	0.08
Food and Agricultural Processing	0.01	0.73	1.00	0.44	-	0.24	0.63	0.63	0.63	0.001
Service and Commercial	0.32	0.76	1.42	0.52	-	0.01	0.10	0.05	0.03	0.01
Other Fuel Combustion	0.04	0.08	0.01	0.004	-	0.0001	0.003	0.003	0.003	0.003
Total Fuel Combustion	30.11	52.07	43.39	11.12	3.57	3.15	16.07	16.01	15.98	0.09
Waste Disposal										
Landfills	4.02	1.97	0.22	0.11	-	0.68	0.79	0.15	0.10	-
Total Waste Disposal	4.02	1.97	0.22	0.11	-	0.68	0.79	0.15	0.10	-
Cleaning and Surface Coatings										
Coatings and Related Process Solvents	-	-	0.87	0.85	-	-	1.25	1.20	1.16	-
Achesives and Sealants	-	-	0.001	0.001	-	-	-	-	-	-
Total Cleaning and Surface Coatings	-	-	0.87	0.86	-	-	1.25	1.20	1.16	-
Petroleum Production and Marketing										
Oil and Gas Production	4.83	0.91	28.48	14.83	-	0.14	0.10	0.103	0.103	-
Petroleum Refining	0.00001	0.00004	32.61	22.70	-	0.0004	0.000001	0.000001	0.000001	-
Petroleum Marketing	0.04	0.11	8.47	8.43	-	0.02	0.16	0.16	0.15	-
Total Petroleum Production and Marketing	4.87	1.03	69.56	45.97	-	0.16	0.26	0.26	0.25	-
Industrial Processes										
Chemical	-	-	84.42	71.61	-	-	0.04	0.039	0.039	-
Mineral Processes	-	-	-	-	-	-	0.02	0.01	0.001	-
Wood and Paper	-	-	-	-	-	-	1.96	0.88	0.65	-
Other Industrial Processes	-	-	0.97	0.85	0.000003	-	4.70	2.79	0.28	-
Total Industrial Processes	-	-	85.40	72.46	0.000003	-	6.71	3.72	0.97	-
Miscellaneous Processes										
Commercial Cooking	-	-	0.002	0.001	-	-	0.01	0.003	0.0001	-
Total Miscellaneous Processes	-	-	0.002	0.001	-	-	0.01	0.003	0.0001	-
Total Stationary Point Sources (tons per year)	39.00	55.06	199.44	130.51	3.57	3.99	25.10	21.34	18.47	0.09

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Areawide²										
Fuel Combustion										
Oil and Gas Production (Combustion)										
Oil and Gas Production (Combustion)	0.70	0.46	0.03	0.008	-	0.0001	0.005	0.005	0.005	-
Manufacturing and Industrial	3.08	3.05	2.81	0.51	-	0.19	0.65	0.64	0.64	-
Food and Agricultural Processing	6.13	7.19	0.86	0.76	-	0.04	0.32	0.32	0.31	0.32
Service and Commercial	0.84	1.07	0.25	0.11	-	0.05	0.09	0.08	0.08	0.01
Total Fuel Combustion	10.75	11.77	3.94	1.39	-	0.27	1.06	1.05	1.04	0.33
Waste Disposal										
Sewage Treatment										
Sewage Treatment	-	-	-	-	-	0.27	-	-	-	-
Other Waste Disposal (Composting)	-	-	10,590.18	847.22	190.11	-	1.98	0.38	0.26	-
Total Waste Disposal	-	-	10,590.18	847.22	190.38	-	1.98	0.38	0.26	-
Cleaning and Surface Coatings										
Degreasing										
Degreasing	-	-	4.34	3.50	-	-	-	-	-	-
Coatings and Related Process Solvents	-	-	7.85	7.71	-	-	-	-	-	-
Adhesives and Sealants	-	-	1.31	1.18	-	-	-	-	-	-
Total Cleaning and Surface Coatings	-	-	13.49	12.39	-	-	-	-	-	-
Petroleum Production and Marketing										
Oil and Gas Production										
Oil and Gas Production	0.0002	0.00004	16.34	6.98	-	-	-	-	-	-
Petroleum Marketing	-	-	112.09	3.21	-	-	-	-	-	-
Total Petroleum Production and Marketing	0.0002	0.00004	128.42	10.19	-	-	-	-	-	-
Industrial Processes										
Chemical										
Chemical	-	-	0.71	0.71	-	-	-	-	-	-
Food and Agriculture	-	-	0.89	0.89	-	-	-	-	-	-
Metal Processes	-	-	-	-	-	-	0.07	0.047	0.028	-
Wood and Paper	-	-	-	-	-	-	0.56	0.39	0.23	-
Total Industrial Processes	-	-	1.59	1.59	-	-	0.63	0.44	0.26	-

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Source Categories	CO	NOX	TOG	ROG [†]	NH3	SOX	PM	PM10	PM2.5	DPM
Solvent Evaporation										
Consumer Products	-	-	70.65	56.12	-	-	-	-	-	-
Architectural Coatings and Related Process Solvents	-	-	29.50	27.65	-	-	-	-	-	-
Pesticides / Fertilizers	-	-	77.19	77.19	487.25	-	-	-	-	-
Agricultural Fertilizer	-	-	-	-	487.25	-	-	-	-	-
Agricultural Non-methyl Bromide Pesticides	-	-	76.68	76.68	-	-	-	-	-	-
Structural Non-methyl Bromide Pesticides	-	-	0.51	0.51	-	-	-	-	-	-
Total Solvent Evaporation	-	-	177.35	160.97	487.25	-	-	-	-	-
Miscellaneous Processes										
Residential Fuel Combustion	17.74	11.51	6.06	2.74	0.16	0.38	2.98	2.86	2.80	-
Fuel Combustion from Cooking	0.55	1.29	0.17	0.08	-	0.03	0.10	0.10	0.10	-
Fuel Combustion from Space Heating	1.71	3.71	0.53	0.23	-	0.10	0.32	0.32	0.32	-
Fuel Combustion from Water Heating	3.16	3.86	0.99	0.43	-	0.17	0.60	0.60	0.60	-
Wood Combustion - Fireplaces	5.26	0.10	1.53	0.70	0.12	0.02	0.94	0.88	0.84	-
Wood Combustion - Wood Stoves	6.25	0.15	2.56	1.16	0.05	0.02	0.87	0.81	0.78	-
Other	0.82	2.40	0.27	0.14	-	0.04	0.15	0.15	0.15	-
Farming Operations	-	-	749.26	123.89	166.04	-	222.90	101.97	14.96	-
Harvest Operations - Dust	-	-	-	-	-	-	50.24	22.82	3.42	-
Livestock Husbandry	-	-	749.26	123.89	166.04	-	23.86	11.55	1.40	-
Tilling Dust	-	-	-	-	-	-	148.80	67.60	10.13	-
Construction and Demolition	-	-	-	-	-	-	17.02	8.33	0.83	-
Paved Road Dust	-	-	-	-	-	-	115.33	52.73	7.91	-
Unpaved Road Dust	-	-	-	-	-	-	34.22	20.34	2.03	-
Fugitive Windblown Dust	-	-	-	-	-	-	67.48	30.81	5.30	-
Fires	2.03	0.05	0.21	0.18	-	-	0.26	0.25	0.24	-
Automobile Fires	0.16	0.004	0.05	0.05	-	-	0.14	0.13	0.13	-
Structural Fires	1.87	0.04	0.16	0.13	-	-	0.12	0.12	0.11	-
Managed Burning and Disposal	15.27	0.98	1.68	1.43	0.15	0.05	1.99	1.95	1.85	-
Commercial Cooking	-	-	4.91	2.00	-	-	12.26	12.26	12.26	-
Commercial Charbroiling	-	-	4.05	1.42	-	-	9.67	9.67	9.67	-
Commercial Cooking (Unspecified)	-	-	0.43	0.15	-	-	2.59	2.59	2.59	-
Deep Fat Frying	-	-	0.43	0.43	-	-	-	-	-	-
Other (Miscellaneous Processes)	-	-	-	-	17.38	-	-	-	-	-
Total Miscellaneous Processes	35.04	12.54	762.12	130.24	183.73	0.43	474.43	231.51	48.19	-
Total Areawide Sources (tons per year)	45.79	24.31	11,677.11	1,164.01	861.37	0.71	478.10	233.38	49.75	0.33

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On-road										
Light Duty Vehicles	253.09	20.72	30.91	28.72	4.01	0.44	2.14	2.11	0.78	0.01
Medium Duty Vehicles	93.44	11.33	10.65	9.73	1.22	0.19	0.69	0.68	0.25	0.006
Light-Heavy Duty Vehicles	17.69	15.55	3.57	3.18	0.98	0.08	1.21	1.21	0.58	0.28
Medium-Heavy Duty Vehicles	6.57	14.19	1.16	1.00	0.44	0.04	0.51	0.51	0.36	0.32
Heavy Duty Vehicles	26.76	117.28	5.12	4.11	4.48	0.40	4.91	4.89	2.88	2.08
Buses	6.09	2.53	0.73	0.39	0.20	0.01	0.10	0.10	0.05	0.03
Total On-Road Mobile Sources (tons per year)	403.65	181.59	52.14	47.13	11.32	1.16	9.55	9.50	4.92	2.72
Other Mobile Sources										
Aircraft	0.08	0.19	0.01	0.005	-	0.01	0.001	0.001	0.001	-
Trains	0.98	7.78	0.00	0.00003	0.004	0.004	0.13	0.13	0.12	0.13
Recreational Boats	-	-	4.86	4.47	-	-	-	-	-	-
Off-road Recreational Vehicles	4.49	0.06	3.87	3.83	0.01	0.01	0.02	0.01	0.01	-
Off-road Equipment	324.72	45.68	30.25	28.17	0.05	0.09	2.29	2.26	2.16	1.86
<i>Airport Ground Support Equipment</i>	<i>0.03</i>	<i>0.01</i>	<i>0.001</i>	<i>0.001</i>	<i>0.00002</i>	<i>0.00002</i>	<i>0.0003</i>	<i>0.0003</i>	<i>0.0003</i>	<i>0.0002</i>
<i>Commercial Equipment</i>	<i>153.20</i>	<i>2.53</i>	<i>7.25</i>	<i>6.87</i>	<i>0.01</i>	<i>0.01</i>	<i>0.14</i>	<i>0.13</i>	<i>0.13</i>	<i>0.04</i>
<i>Construction and Mining Equipment</i>	<i>25.40</i>	<i>19.40</i>	<i>2.70</i>	<i>2.40</i>	<i>0.03</i>	<i>0.03</i>	<i>1.02</i>	<i>1.01</i>	<i>0.97</i>	<i>0.88</i>
<i>Industrial Equipment</i>	<i>3.87</i>	<i>0.76</i>	<i>0.15</i>	<i>0.12</i>	<i>0.002</i>	<i>0.001</i>	<i>0.05</i>	<i>0.05</i>	<i>0.05</i>	<i>0.04</i>
<i>Lawn and Garden</i>	<i>133.91</i>	<i>1.84</i>	<i>16.25</i>	<i>15.35</i>	<i>0.01</i>	<i>0.01</i>	<i>0.18</i>	<i>0.18</i>	<i>0.17</i>	<i>0.01</i>
<i>Military Tactical Support Equipment</i>	<i>0.03</i>	<i>0.03</i>	<i>0.004</i>	<i>0.004</i>	<i>0.0001</i>	<i>0.0001</i>	<i>0.002</i>	<i>0.001</i>	<i>0.001</i>	<i>0.002</i>
<i>Oil Drilling and Workover</i>	<i>1.10</i>	<i>2.21</i>	<i>0.21</i>	<i>0.19</i>	<i>0.0001</i>	<i>0.01</i>	<i>0.06</i>	<i>0.06</i>	<i>0.06</i>	<i>0.06</i>
<i>Transport Refrigeration Units</i>	<i>7.19</i>	<i>18.90</i>	<i>3.67</i>	<i>3.23</i>	<i>0.0003</i>	<i>0.04</i>	<i>0.83</i>	<i>0.83</i>	<i>0.79</i>	<i>0.83</i>
Off-road Equipment (Registered Portable Equipment)	9.43	16.11	1.68	1.48	0.02	0.03	0.62	0.61	0.59	0.62
Farm Equipment	34.82	32.50	6.15	5.47	0.01	0.01	1.98	1.97	1.88	1.94
Fuel Storage and Handling	-	-	3.04	3.04	-	-	-	-	-	-
Total Other Mobile Sources (tons per year)	374.52	102.31	49.86	46.46	0.09	0.15	5.03	4.99	4.77	4.56
Total Community Emissions (tons per year)	863	363	11,979	1,388	876	6	518	269	78	8

The community-scale planning inventory does not include emissions from natural sources such as biogenic, geogenic, and wildfires.

¹ For more details on source categories and associated activities (emission inventory codes), see documentation at <https://ww3.arb.ca.gov/ei/documentation.htm>

² Stationary Point sources summarizes District reported criteria emissions by categories. Areawide categories include stationary aggregate sources (Page 2) and area sources (Page 3). CARB and District calculate emissions for their assigned areawide categories at the county level.

Documentation of areawide source methodologies from District and CARB can be found at <https://ww2.arb.ca.gov/index-methodologies-major-category>

CO: Carbon Monoxide; NOx: Nitrogen Oxides; TOG: Total Organic Gases; ROG: Reactive Organic Gases; NH3: Ammonia; SOx: Sulfur Oxides; PM: Particulate Matter; PM₁₀: Particulate Matter 10 microns or smaller; PM_{2.5}: Particulate Matter 2.5 microns or smaller; DPM: Diesel Particulate Matter

[†] Reactive Organic Gases (ROG) and Volatile Organic Compounds (VOC) are used interchangeably

Overall emissions for Arvin Lamont community shown in **Table A** were presented during the Arvin Lamont CSC meeting on September 22, 2021. **Table B** shows the most updated overall emissions for Arvin Lamont due to updated on-road emission factor data from CARB's EMFAC 2021 model.

Table A
2019 Emission Inventory in Arvin Lamont Community
(Emissions in tons per year)
presented in Arvin Lamont CSC meeting on September 22, 2021

Source Category	NOx		ROG		PM2.5		DPM	
Stationary Sources	55.1	15%	130.5	9%	18.5	23%	0.1	1%
Areawide Sources	24.3	6%	1,164.0	84%	49.7	61%	0.3	4%
Other Mobile Sources	102.3	27%	46.5	3%	4.8	6%	4.6	57%
On-Road Mobile Sources*	193.2	52%	47.1	4%	8.0	10%	3.0	38%
Total	374.9	100%	1,388.0	100%	81.0	100%	8.0	100%

* On-road mobile emissions are calculated using CARB's EMFAC 2017 model.

Table B
2019 Emission Inventory in Arvin Lamont Community
(Emissions in tons per year)
updated on October 20, 2021

Source Category	NOx		ROG		PM2.5		DPM	
Stationary Sources	55.1	15%	130.5	9%	18.5	24%	0.1	1%
Areawide Sources	24.3	7%	1,164.0	84%	49.7	64%	0.3	4%
Other Mobile Sources	102.3	28%	46.5	3%	4.8	6%	4.6	60%
On-Road Mobile Sources*	181.6	50%	47.1	4%	4.9	6%	2.7	35%
Total	363.3	100%	1,388.1	100%	77.9	100%	7.7	100%

* On-road mobile emissions are calculated using CARB's EMFAC 2021 model.