

**University of North Carolina at Chapel Hill**

Chapel Hill, North Carolina

Orange County

Facility ID # 6800043

Permit # 03069T35

**2018 Annual Emissions Inventory Facility Summary**

Pollutant	Units	Boiler #6				Boiler #6	Boiler #7				Boiler #7	Boiler #8		Boiler #8	Railcar Dump Pits	Coal Storage Silos	Coal Silo Conveyors	Sorbent Railcar Dump Pit	Ash Silo w/ Loadout	Coal Conveyor & Crusher Building	Blackstart Generators G1 & G2	Fuel Oil Storage Tanks Cogen	Total
		Natural Gas	Fuel Oil	Wood	Coal	Total	Natural Gas	Fuel Oil	Wood	Coal	Total	Natural Gas	Fuel Oil	Total									
<b>Criteria Pollutants</b>																							
PM	tpy	1.29	0.000	0.00	3.58	4.87	1.19	0.000		3.85	5.05	0.084	0.001	0.085	4.67E-03	0.0032	0.0032	1.24E-02	1.37	0.50	0.24	12.1	
PM-10	tpy	1.29	0.000	0.00	3.58	4.87	1.19	0.000		3.85	5.05	0.084	0.000	0.084	2.21E-03	0.0032	0.0032	5.89E-03	1.37	0.50	0.24	12.1	
PM-2.5	tpy	1.29	0.000	0.00	3.58	4.87	1.19	0.000		3.85	5.05	0.084	0.000	0.084	6.95E-04	0.0031	0.0031	1.85E-03	1.30	0.48	0.24	8.9	
NOx	tpy	40.16	0.000	0.00	97.52	137.68	43.80	0.001		123.69	167.49	0.647	0.002	0.649							4.54	310.4	
VOC	tpy	0.93	0.000	0.00	0.20	1.13	0.86	0.000		0.21	1.07	0.061	0.000	0.061							0.20	2.7	
CO	tpy	14.24	0.000	0.00	14.46	28.70	13.19	0.000		15.57	28.76	0.932	0.001	0.933							0.61	59.0	
SO2	tpy	0.00	0.001		147.66	147.66	0.00	0.001		155.64	155.64	0.007	0.001	0.008							0.10	303.4	
<b>Greenhouse Gases</b>																							
CO2	tpy	24,884	0.41	0.00	106,631	131,516	22,653	5.77E-01		112,452	135,105	1,408	5	1,413						389.99		268423.4	
Methane	tpy	0.38	1.35E-05	0.00E+00	10.3	10.67	0.36	1.95E-05		11.08	11.43	0.025	1.84E-04	0.025							0.016	22.1	
Nitrous Oxide	tpy	0.038	2.70E-06	0.00E+00	1.5	1.53	3.57E-02	3.91E-06		1.61	1.65	0.003	3.67E-05	0.003							0.0032	3.2	
<b>HAPs/TAPs</b>																							
1,3 Butadiene	lb/yr				0	0				0	0			0								0.0	
2,3,7,8-TCDD	lb/yr			0.00E+00	4.88E-07	4.88E-07				5.24E-07	5.24E-07			0								0.0	
2,4-Dinitrotoluene	lb/yr				9.55E-03	9.55E-03				0.01	0.01			0								0.0	
2-Chloroacetophenone	lb/yr				0.24	0.24				0.26	0.2566508			0								0.5	
Acetaldehyde	lb/yr			0.00E+00	19.44	19.44				20.90	20.90			0							0.12	40.5	
Acetic Acid	lb/yr				0	0				0	0			0								0.0	
Acetophenone	lb/yr			0.00E+00	0.51	0.51				0.55	0.55			0								1.1	
Acrolein	lb/yr			0.00E+00	9.89	9.89				10.63	10.63			0							0.04	20.6	
Antimony	lb/yr		0.00E+00	0.00E+00	0.27	0.27				0.30	0.30		0.00E+00	0								0.6	
Arsenic	lb/yr	0.07	1.62E-07	0.00E+00	0.26	0.32	6.28E-02	2.35E-07		0.27	0.34	0.004	2.21E-04	0.005								0.7	
Benzene	lb/yr	0.7	7.98E-05	0.00E+00	44.34	45.05	6.59E-01	1.16E-04		47.66	48.32	0.047	1.09E-03	0.048							3.71	97.1	
Benzo(a)pyrene	lb/yr			0.00E+00	1.30E-03	1.30E-03				0.00	1.39E-03			0								0.0	
Benzyl Chloride	lb/yr				23.88	23.875551				25.67	25.67			0								49.5	
Beryllium	lb/yr		1.22E-07	0.00E+00	0.04	0.04		1.76E-07		0.05	0.05			1.66E-04	1.66E-04							0.1	
Biphenyl	lb/yr				5.80E-02	0.06				6.23E-02	0.06			0								0.1	
Bis(2-ethylhexyl)phthalate (DEHP)	lb/yr				2.49	2.49				2.68	2.68			0								5.2	
Bromine	lb/yr				6.95	6.95				7.49	7.49			0								14.4	
Bromoform	lb/yr				1.33	1.33				1.43	1.43			0								2.8	
Cadmium	lb/yr	0.37	1.22E-07	0.00E+00	1.18E-01	0.49	3.45E-01	1.76E-07		1.27E-01	0.47	0.024	1.66E-04	0.025								1.0	
Carbon Disulfide	lb/yr				4.43	4.43				4.77	4.77			0								9.2	
Chlorine	lb/yr			0.00E+00	91.58	91.58				98.65	98.65											190.2	
Chlorobenzene	lb/yr			0.00E+00	0.75	0.75				0.81	0.81			0								1.6	
Chloroform	lb/yr			0.00E+00	2.01	2.01				2.16	2.16			0								4.2	
Chromium	lb/yr	0.47	1.22E-07	0.00E+00	4.07	4.55	4.40E-01	1.76E-07		4.38	4.82	0.031	1.66E-04	0.031								9.4	
Chromium VI	lb/yr	0.47	3.57E-08		0.01	0.48	4.40E-01			0.01	0.45	0.031	4.87E-05	0.031								1.0	
Cobalt	lb/yr		0.00E+00	0.00E+00	0.23	0.23		0.00E+00		0.25	0.25			0								0.5	
Cumene	lb/yr				0.18	0.18				0.19	0.19			0								0.4	
Cyanide	lb/yr				85.27	85.27				91.66	91.66			0								176.9	
Dibenzofurans	lb/yr				6.86E-03	0.01				7.37E-03	0.01			0								0.0	
Dichlorobenzene	lb/yr	0.41			0.4069032	3.77E-01				3.77E-01	0.027			0.027								0.8	
Dimethyl Sulfate	lb/yr				1.64	1.64				1.76	1.76			0								3.4	
Ethyl Benzene	lb/yr	2.37E-05	0.00E+00		3.21	3.21		3.43E-05		3.45	3.45			3.23E-04	3.23E-04							6.7	
Ethyl Chloride	lb/yr				1.43	1.43				1.54	1.54			0								3.0	
Ethylene Dibromide	lb/yr				4.09E-02	0.04				4.40E-02	0.04			0								0.1	
Ethylene Dichloride	lb/yr			0.00E+00	1.36	1.36				1.47	1.47			0								2.8	
Ethylene Glycol	lb/yr				0	0				0	0			0								0.0	
Ethylene Oxide	lb/yr				0	0				0	0			0								0.0	
Flouride	lb/yr		1.08E-03		0.00	0.00			1.57E-03	0.00	0.00			1.47E-02	1.47E-02							0.0	
Formaldehyde	lb/yr	25.43	1.39E-03	0.00E+00	55.80	81.23	2.36E+01	2.02E-03		60.10	83.66	1.664	1.90E-02	1.683						0.38		166.9	
Glycol Ethers	lb/yr				0	0				0	0			0								0.0	
Hexane	lb/yr	610.35			2.29	612.64	5.65E+02			2.46	567.73	39.931		39.931								1220.3	
Hydrogen Chloride	lb/yr			0.00E+00	10,854.29	10,854.29				11,691.31	11,691.31			0								22545.6	
Hydrogen Fluoride	lb/yr				195.04	195.04				210.08	210.08			0								405.1	
Isophorone	lb/yr				19.78	19.78				21.27	21.27			0								41.0	
Lead	lb/yr	0.17	3.65E-07	0.00E+00	1.49	1.66	1.57E-01	5.29E-07		1.61	1.76	0.011	4.98E-04	0.012								3.4	
Manganese	lb/yr	0.13	2.44E-07	0.00E+00	10.18	10.30	1.19E-01	3.53E-07		10.96	11.08	0.008	3.32E-04	0.009								21.4	
Mercury	lb/yr	0.09	1.22E-05	0.00E+00	0.71	0.80	8.17E-02	1.76E-05		0.76	0.85	0.006	1.66E-04	0.006								1.7	
Methyl Chloride	lb/yr			0.00E+00	18.08	18.08				19.43	19.43			0								37.5	
Methyl Ethyl Ketone	lb/yr			0.00E+00	13.30	13.30				14.30	14.30			0								27.6	
Methyl Bromide	lb/yr				5.46	5.46				5.87	5.87			0								11.3	
Methyl Chloroform	lb/yr	6.84E-06	0.00E+00		6.84E-06	6.84E-06		9.91E-06		9.91E-06	9.91E-06			9.32E-05	9.32E-05							0.0	
Methyl Hydrazine	lb/yr				5.80	5.80				6.23	6.23			0								12.0	
Methyl Methacrylate	lb/yr				0.68	0.68				0.73	0.73			0								1.4	
Methyl Tert Butyl Ether	lb/yr				1.19	1.19				1.28	1.28			0								2.5	
Methylene Chloride	lb/yr			0.00E+00	9.89	9.89				10.63	10.63			0								20.5	
Naphthalene	lb/yr	0.21	9.66E-08	0.00E+00	0.44	0.65	1.92E-01	1.40E-05		0.48	0.67	0.014	1.32E-04	0.014						0.62		2.0	
Nickel	lb/yr	0.71	1.22E-07	0.00E+00	8.28	9.00	6.59E-01	1.76E-07		8.92	9.58	0.047	1.66E-04	0.047								18.6	
PAH	lb/yr				0	0				0	0			0								0.0	
Phenol	lb/yr			0.00E+00	0.55	0.55				0.59	0.59			0								1.1	
Phosphorus	lb/yr			0.00E+00	1.24	1.24				1.33	1.33			0								2.6	
POM	lb/yr	0.22	9.57E-07	0.00E+00	1.90	2.12	2.08E-01	1.39E-06		2.05	2.25	0.015	1.30E-03	0.016								4.4	
Propionaldehyde	lb/yr			0.00E+00	12.96	12.96				13.93	13.93			0								26.9	
Propylene	lb/yr				0	0				0	0			0						1.01		1.0	
Selenium	lb/yr		6.09E-07	0.00E+00	0.18	0.18		8.82E-07		0.20	0.20			8.30E-04	8.30E-04							0.4	
Styrene	lb/yr			0.00E+00	0.85	0.85				0.92	0.92</												