University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Orange County
Facility ID # 6800043
Permit # 03069T34

2016 Annual Emissions Inventory Summary
Cogeneration Facility

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									
Criteria Pollutants																							
PM	tpy	0.88	0	0	3.63	4.51	1.04	0		3.47	4.51	0.147	0	0.147	4.67E-03	0.0032	0.0032	1.31E-02	1.29	0.50	0.07		11.1
PM-10	tpy	0.88	0	0	3.63	4.51	1.04	0		3.47	4.51	0.147	0	0.147	2.21E-03	0.0032	0.0032	6.18E-03	1.29	0.50	0.07		11.1
PM-2.5	tpy	0.88	0	0	2.10	2.97	1.04	0		2.00	3.04	0.147	0	0.147	6.94E-04	0.0031	0.0031	1.94E-03	1.23	0.48	0.07		7.9
NOx	tpy	28.33	0	0	102.43	130.76	37.21	0		108.49	145.70	1.147	0	1.147							1.40		279.0
VOC	tpy	0.63	0	0	0.20	0.83	0.75	0		0.19	0.94	0.107	0	0.107							0.06	0.21	2.2
CO	tpy	9.69	0	0	14.66	24.35	11.49	0		14.01	25.49	1.627	0	1.627							0.19		51.7
SO2	tpy	0.00	0		117.96	117.96	0.00	0		121.80	121.80	0.012	0	0.012							0.001		239.8
Greenhouse Gases																							
CO2	tpy	19,092	0	0	121,367	140,459	19,091	0		97,871	116,962	2,448	0	2,448							119.72		259,989
Methane	tpy	0.26	0	0	0.16	0.43	0.31	0		0.16	0.47	0.044	0	0.044							0.005		0.94
Nitrous Oxide	tpy	0.026	0	0	1.5	1.54	3.10E-02	0		1.45	1.48	0.004	0	0.004							0.0010		3.0
HAPs/TAPs																							
1,3 Butadiene	lb/yr					0					0			0									0.0
2,3,7,8-TCDD	lb/yr			0	5.15E-07	5.15E-07				4.93E-07	4.93E-07			0									0.0
2,4-Dinitrotoluene	lb/yr				1.01E-02	1.01E-02				0.01	0.01			0									0.0
2-Chloroacetophenone	lb/yr				0.25	0.25				0.24	0.24			0									0.5
Acetaldehyde	lb/yr			0	20.54	20.54				19.63	19.63			0							0.04		40.2
Acetic Acid	lb/yr					0					0			0									0.0
Acetophenone	lb/yr			0	0.54	0.54				0.52	0.52			0									1.1
Acrolein	lb/yr			0	10.45	10.45				9.99	9.99			0							0.01		20.5
Antimony	lb/yr		0	0	0.28	0.28		0		0.27	0.27			0									0.5
Arsenic	lb/yr	0.05	0	0	0.26	0.30	5.47E-02	0		0.25	0.30	0.008	0	0.008									0.6
Benzene	lb/yr	0.5	0	0	46.86	47.34	5.74E-01	0		44.78	45.35	0.081	0	0.081							1.14		93.9
Benzo(a)pyrene	lb/yr			0	1.37E-03	1.37E-03				0.00	1.31E-03			0									0.0
Benzyl Chloride	lb/yr				25.23	25.23				24.11	24.11			0									49.3
Beryllium	lb/yr		0	0	0.05	0.05		0		0.04	0.04		0	0.00E+00									0.1
Biphenyl	lb/yr				6.13E-02	0.06				0.06	0.06			0									0.1
Bis(2-ethylhexyl)phthalate (DEHP)	lb/yr				2.63	2.63				2.51	2.51			0									5.1
Bromine	lb/yr				7.05	7.05				6.74	6.74			0									13.8
Bromoform	lb/yr				1.41	1.41				1.34	1.34			0									2.7
Cadmium	lb/yr	0.25	0	0	1.19E-01	0.37	3.01E-01	0		1.14E-01	0.42	0.043	0	0.043									0.83
Carbon Disulfide	lb/yr				4.69	4.69				4.48	4.48			0									9.2
Chlorine	lb/yr			0	92.83	92.83				88.71	88.71												181.5
Chlorobenzene	lb/yr			0	0.79	0.79				0.76	0.76			0									1.6
Chloroform	lb/yr			0	2.13	2.13				2.03	2.03			0									4.2
Chromium	lb/yr	0.32	0	0	4.13	4.45	3.83E-01	0		3.94	4.33	0.054	0	0.054									8.83
Chromium VI	lb/yr	0.32	0		0.01	0.33	3.83E-01	0		0.01	0.39	0.054	0	0.054									0.78
Cobalt	lb/yr		0	0	0.24	0.24		0		0.23	0.23			0									0.5
Cumene	lb/yr				0.19	0.19				0.18	0.18			0									0.4
Cyanide	lb/yr				90.11	90.11				86.11	86.11			0									176.2
Dibenzofurans	lb/yr				7.24E-03	0.01				6.92E-03	0.01			0									0.0
Dichlorobenzene	lb/yr	0.28				0.27695124	3.28E-01				3.28E-01	0.046		0.046									0.7
Dimethyl Sulfate	lb/yr				1.73	1.73				1.65	1.65			0									3.4
Ethyl Benzene	lb/yr		0	0	3.39	3.39		0		3.24	3.24		0	0.00E+00									6.6
Ethyl Chloride	lb/yr				1.51	1.51				1.45	1.45			0									3.0
Ethylene Dibromide	lb/yr				4.33E-02	0.04				4.13E-02	0.04			0									0.1
Ethylene Dichloride	lb/yr			0	1.44	1.44				1.38	1.38			0									2.8
Ethylene Glycol	lb/yr					0					0			0									0.0
Ethylene Oxide	lb/yr					0					0			0									0.0
Flouride	lb/yr		0			0		0			0		0	0									0.0
Formaldehyde	lb/yr	17.31	0	0	56.56	73.87	2.05E+01	0		54.05	74.56	2.906	0	2.906							0.12		151.5
Glycol Ethers	lb/yr					0					0			0									0.0
Hexane	lb/yr	415.43			2.41	417.84	4.92E+02			2.31	494.57	69.744		69.744									982.2
Hydrogen Chloride	lb/yr			0	11,002.40	11,002.40				10514.1	10514.1			0									21516.5
Hydrogen Fluoride	lb/yr				197.70	197.70				188.92	188.92			0									386.6
Isophorone	lb/yr				20.91	20.91				19.98	19.98			0									40.9
Lead	lb/yr	0.12	0	0	1.51	1.63	1.37E-01	0		1.45	1.58	0.019	0	0.019									3.2
Manganese	lb/yr	0.09	0	0	10.31	10.40	1.04E-01	0		9.86	9.96	0.015	0	0.015									20.4
Mercury	lb/yr	0.06	0	0	0.72	0.78	7.11E-02	0		0.69	0.76	0.010	0	0.010									1.5
Methly Chloride	lb/yr			0	19.10	19.10				18.26	18.26			0									37.4
Methly Ethyl Ketone	lb/yr			0	14.06	14.06				13.43	13.43			0									27.5
Methyl Bromide	lb/yr				5.77	5.77				5.51	5.51			0									11.3
Methyl Chloroform	lb/yr		0	0		0		0			0		0	0									0.0
Methyl Hydrazine	lb/yr				6.13	6.13				5.86	5.86			0									12.0
Methyl Methacrylate	lb/yr				0.72	0.72				0.69	0.69			0									1.4
Methyl Tert Butyl Ether	lb/yr				1.26	1.26				1.21	1.21			0									2.5
Methylene Chloride	lb/yr			0	10.45	10.45				9.99	9.99			0									20.4
Napthalene	lb/yr	0.14	0	0	0.47	0.61	1.67E-01	0		0.45	0.61	0.024	0	0.024							0.19		1.4
Nickel	lb/yr	0.48	0	0	8.40	8.88	5.74E-01	0		8.03	8.60	0.081	0	0.081									17.6
PAH	lb/yr					0					0			0									0.0
Phenol	lb/yr			0	0.58	0.58				0.55	0.55			0									1.1
Phosphorus	lb/yr			0	1.25	1.25				1.20	1.20												2.5
POM	lb/yr	0.15	0	0	1.93	2.08	1.81E-01	0		1.84	2.02	0.026	0	0.026									4.1
Propionaldehyde	lb/yr			0	13.70	13.70				13.09	13.09			0									26.8
Propylene	lb/yr					0					0			0							0.31		0.3
Selenium	lb/yr		0	0	0.18	0.18		0		0.18	0.18		0	0.00E+00									0.4
Styrene	lb/yr			0	0.90	0.90				0.86	0.86			0									1.8
Tetrachloroethane	lb/yr				1.55	1.55				1.48	1.48			0									3.0
Toluene	lb/yr	0.78	0	0	8.65	9.44	9.30E-01	0		8.27	9.20	0.132	0	0.132							0.41		19.2
Vinyl Acetate	lb/yr				0.27	0.27				0.26	0.26			0									0.5
Xylenes	lb/yr		0	0	1.33	1.33		0		1.27	1.27		0	0.00E+00							0.28		2.9