University of North Carolina at Chapel Hill
Chapel Hill, North Carolina
Orange County
Facility ID # 6800043
Permit # 03069T35

2017 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	1.23	9.70E-06	0.00E+00	3.92	5.15	0.93	0.00E+00		4.07	5.00	0.082	6.29E-03	0.088	4.91E-03	0.0034	0.0034	1.07E-02	1.26	0.53	0.05		12.1
PM-10	tpy	1.23	9.70E-06	0.00E+00	3.92	5.15	0.93	0.00E+00		4.07	5.00	0.082	1.91E-03	0.083	2.32E-03	0.0034	0.0034	5.04E-03	1.26	0.53	0.05		12.1
PM-2.5	tpy	1.23	2.42E-06	0.00E+00	2.26	3.49	0.93	0.00E+00		2.35	3.28	0.082	4.76E-04	0.082	7.31E-04	0.0032	0.0032	1.58E-03	1.20	0.50	0.05		8.6
NOx	tpy	36.16	2.18E-04	0.00E+00	100.54	136.70	31.20	0.00E+00		120.64	151.84	0.581	1.37E-02	0.594							1.00		290.1
VOC	tpy	0.89	1.47E-06	0.00E+00	0.21	1.10	0.67	0.00E+00		0.22	0.89	0.059	3.81E-04	0.059							0.04	0.22	2.3
CO	tpy	13.61	3.67E-05	0.00E+00	15.82	29.43	10.24	0.00E+00		16.57	26.81	0.902	9.53E-03	0.911							0.13		57.3
SO2	tpy	0.00	3.25E-04		149.85	149.85	0.00	0.00E+00		141.14	141.14	0.006	5.49E-04	0.007							0.00		291.0
Greenhouse Gases																							0.0
CO2	tpy	24,644	0.21	0.00	120,462	145,106	17,333	0.00E+00		117,846	135,179	1,487	49	1,536							86.13		281,908
Methane	tpy	0.37	6.67E-06	0.00E+00	11.3	11.62	0.28	0.00E+00		11.78	12.06	0.024	1.73E-03	0.026							0.003		23.7
Nitrous Oxide	tpy	0.037	1.33E-06	0.00E+00	1.6	1.67	2.77E-02	0.00E+00		1.71	1.74	0.002	3.46E-04	0.003							0.0007		3.4
HAPs/TAPs																							0.0
1,3 Butadiene	lb/yr					0					0			0									0.0
2,3,7,8-TCDD	lb/yr			0.00E+00	5.22E-07	5.22E-07				5.42E-07	5.42E-07			0									0.0
2,4-Dinitrotoluene	lb/yr				1.02E-02	1.02E-02				0.01	0.01			0									0.0
2-Chloroacetophenone	lb/yr				0.26	0.26				0.27	0.26537098			0									0.5
Acetaldehyde	lb/yr			0.00E+00	20.81	20.81				21.61	21.61			0							0.03		42.4
Acetic Acid	lb/yr					0					0			0									0.0
Acetophenone	lb/yr			0.00E+00	0.55	0.55				0.57	0.57			0									1.1
Acrolein	lb/yr			0.00E+00	10.59	10.59				10.99	10.99			0							0.01		21.6
Antimony	lb/yr		0.00E+00	0.00E+00	0.30	0.30		0.00E+00		0.31	0.31			0									0.6
Arsenic	lb/yr	0.06	8.23E-08	0.00E+00	0.28	0.34	4.88E-02	0.00E+00		0.29	0.34	0.004	2.13E-03	0.006									0.7
Benzene	lb/yr	0.7	4.04E-05	0.00E+00	47.47	48.15	5.12E-01	0.00E+00		49.28	49.80	0.045	1.05E-02	0.056							0.82		98.8
Benzo(a)pyrene	lb/yr			0.00E+00	1.39E-03	1.39E-03				0.00	1.44E-03			0									0.0
Benzyl Chloride	lb/yr				25.56	25.561004				26.54	26.54			0									52.1
Beryllium	lb/yr		6.17E-08	0.00E+00	0.05	0.05		0.00E+00		0.05	0.05		1.60E-03	1.60E-03									0.1
Biphenyl	lb/yr				6.21E-02	0.06				6.44E-02	0.06			0									0.1
Bis(2-ethylhexyl)phthalate (DEHP)	lb/yr				2.67	2.67				2.77	2.77			0									5.4
Bromine	lb/yr				7.61	7.61				7.97	7.97			0									15.6
Bromoform	lb/yr				1.42	1.42				1.48	1.48			0									2.9
Cadmium	lb/yr	0.36	6.17E-08	0.00E+00	1.29E-01	0.49	2.68E-01	0.00E+00		1.35E-01	0.40	0.024	1.60E-03	0.025									0.91
Carbon Disulfide	lb/yr				4.75	4.75				4.93	4.93			0									9.7
Chlorine	lb/yr			0.00E+00	100.23	100.23				104.94	104.94												205.2
Chlorobenzene	lb/yr			0.00E+00	0.80	0.80				0.83	0.83			0									1.6
Chloroform	lb/yr			0.00E+00	2.15	2.15				2.24	2.24			0									4.4
Chromium	lb/yr	0.45	6.17E-08	0.00E+00	4.45	4.91	3.41E-01	0.00E+00		4.66	5.01	0.030	1.60E-03	0.032									9.95
Chromium VI	lb/yr	0.45	1.81E-08		0.01	0.46	3.41E-01	0.00E+00		0.01	0.35	0.030	4.70E-04	0.031									0.84
Cobalt	lb/yr		0.00E+00	0.00E+00	0.26	0.26		0.00E+00		0.27	0.27			0									0.5
Cumene	lb/yr				0.19	0.19				0.20	0.20			0									0.4
Cyanide	lb/yr				91.29	91.29				94.78	94.78			0									186.1
Dibenzofurans	lb/yr				7.34E-03	0.01				7.62E-03	0.01			0									0.0
Dichlorobenzene	lb/yr	0.39				0.3888771	2.93E-01				2.93E-01	0.026		0.026									0.7
Dimethyl Sulfate	lb/yr				1.75	1.75				1.82	1.82			0									3.6
Ethyl Benzene	lb/yr		1.20E-05	0.00E+00	3.43	3.43		0.00E+00		3.56	3.56		3.11E-03	3.11E-03									7.0
Ethyl Chloride	lb/yr				1.53	1.53				1.59	1.59			0									3.1
Ethylene Dibromide	lb/yr				4.38E-02	0.04				4.55E-02	0.05			0									0.1
Ethylene Dichloride	lb/yr			0.00E+00	1.46	1.46				1.52	1.52			0									3.0
Ethylene Glycol	lb/yr					0					0			0									0.0
Ethylene Oxide	lb/yr					0					0			0									0.0
Flouride	lb/yr		5.48E-04			0.00		0.00E+00			0.00		1.42E-01	1.42E-01									0.1
Formaldehyde	lb/yr	24.30	7.05E-04	0.00E+00	61.07	85.37	1.83E+01	0.00E+00		63.93	82.23	1.610	1.83E-01	1.793							0.08		169.5
Glycol Ethers	lb/yr					0					0			0									0.0
Hexane	lb/yr	583.32			2.45	585.76	4.39E+02			2.54	441.60	38.650		38.650									1066.0
Hydrogen Chloride	lb/yr			0.00E+00	11,879.47	11,879.47				12436.95	12436.95			0									24316.4
Hydrogen Fluoride	lb/yr				213.46	213.46				223.48	223.48			0									436.9
Isophorone	lb/yr				21.18	21.18				21.99	21.99			0									43.2
Lead	lb/yr	0.16	1.85E-07	0.00E+00	1.63	1.80	1.22E-01	0.00E+00		1.71	1.83	0.011	4.80E-03	0.016									3.6
Manganese	lb/yr	0.12	1.23E-07	0.00E+00	11.14	11.26	9.27E-02	0.00E+00		11.66	11.75	0.008	3.20E-03	0.011									23.0
Mercury	lb/yr	0.08	6.17E-06	0.00E+00	0.78	0.86	6.34E-02	0.00E+00		0.81	0.88	0.006	1.60E-03	0.007									1.7
Methly Chloride	lb/yr			0.00E+00	19.35	19.35				20.09	20.09			0									39.4
Methly Ethyl Ketone	lb/yr			0.00E+00	14.24	14.24				14.78	14.78			0									29.0
Methyl Bromide	lb/yr				5.84	5.84				6.07	6.07			0									11.9
Methyl Chloroform	lb/yr		3.47E-06	0.00E+00		3.47E-06		0.00E+00			0.00E+00		8.99E-04	8.99E-04									0.0
Methyl Hydrazine	lb/yr				6.21	6.21				6.44	6.44			0									12.7
Methyl Methacrylate	lb/yr				0.73	0.73				0.76	0.76			0									1.5
Methyl Tert Butyl Ether	lb/yr				1.28	1.28				1.33	1.33			0									2.6
Methylene Chloride	lb/yr			0.00E+00	10.59	10.59				10.99	10.99			0									21.6
Napthalene	lb/yr	0.20	4.89E-08	0.00E+00	0.47	0.67	1.49E-01	0.00E+00		0.49	0.64	0.013	1.27E-03	0.014							0.14		1.5
Nickel	lb/yr	0.68	6.17E-08	0.00E+00	9.07	9.75	5.12E-01	0.00E+00		9.49	10.01	0.045	1.60E-03	0.047									19.8
PAH	lb/yr					0					0			0									0.0
Phenol	lb/yr			0.00E+00	0.58	0.58				0.61	0.61			0									1.2
Phosphorus	lb/yr			0.00E+00	1.36	1.36				1.42	1.42												2.8
POM	lb/yr	0.21	4.85E-07	0.00E+00	2.08	2.29	1.61E-01	0.00E+00		2.18	2.34	0.014	1.26E-02	0.027									4.7
Propionaldehyde	lb/yr			0.00E+00	13.88	13.88				14.41	14.41			0									28.3
Propylene	lb/yr					0					0			0							0.22		0.2
Selenium	lb/yr		3.08E-07	0.00E+00	0.20	0.20		0.00E+00		0.21	0.21		8.00E-03	8.00E-03									0.4
Styrene	lb/yr			0.00E+00	0.91	0.91				0.95	0.95			0									1.9
Tetrachloroethane	lb/yr				1.57	1.57				1.63	1.63			0									3.2
Toluene	lb/yr	1.10	1.17E-03	0.00E+00	8.76	9.87	8.29E-01	0.00E+00		9.10	9.93	0.073	3.04E-01	0.377							0.30		20.5
Vinyl Acetate	lb/yr				0.28	0.28				0.29	0.29			0									0.6
Xylenes	lb/yr		2.06E-05	0.00E+00	1.35	1.35		0.00E+00		1.40	1.40		5.34E-03	5.34E-03							0.20		3.0