Table B-4: Hazardous Air Pollutant (HAPs) Emissions
Wolf 1 CHP Data Center
Newark, Delaware

		LM 2500 DLE=	6	Wartsila 18V50SG =	3
Parameter	Units	Per Combustion Turbine	CT combined heat input and combined annual hours	Per Reciprocating Engine	RGE combined heat input and combined annual hours
Maximum heat input (HHV):	MMBtu/hr	220.3	1,322	138.3	415
Maximum annual hours:	hr/yr	8,760	52,560	8,580	25,740

Pollutant	CT Gas-Fired Emission Factor * (lb/MMBtu)	4-Stroke Lean-Burn Reciprocating Engines Emission Factor ‡ (lb/MMBtu)	Maximum CT Gas-Fired Emissions (lb/hr)	Maximum RGE Emissions (lb/hr)	Maximum Uncontrolled CT and RGE [TOTAL] (tpy)	Maximum Controlled CT and RGE [TOTAL]+ (tpy)
1,1,2,2-Tetrachloroethane		4.00E-05		0.006	0.071	0.007
1,1,2-Trichloroethane		3.18E-05		0.004	0.057	0.006
1,3-Butadiene	4.3E-07	2.67E-04	9.47E-05	0.037	0.478	0.048
1,3-Dichloropropene		2.64E-05		0.004	0.047	0.005
2-Methylnaphthalene		3.32E-05		0.005	0.059	0.006
2,2,4-Trimethylpentane		2.50E-04		0.035	0.445	0.044
Acenaphthene		1.25E-06		0.000	0.002	0.000
Acenaphthylene		5.53E-06		0.001	0.010	0.001
Acetaldehyde	4.0E-05	8.36E-03	8.81E-03	1.156	15.112	1.511
Acrolein	6.4E-06	5.14E-03	1.41E-03	0.711	9.186	0.919
Benzene	1.2E-05	4.40E-04	2.64E-03	0.061	0.853	0.085
Benzo(b)fluoranthene		1.66E-07		0.000	0.000	0.000
Benzo(e)pyrene		4.15E-07		0.000	0.001	0.000
Benzo(g,h,i)perylene		4.14E-07		0.000	0.001	0.000
Biphenyl		2.12E-04		0.029	0.377	0.038
Carbon Tetrachloride		3.67E-05		0.005	0.065	0.007
Chlorobenzene		3.04E-05		0.004	0.054	0.005
Chloroform		2.85E-05		0.004	0.051	0.005
Chyrsene		6.93E-07		0.000	0.001	0.000
Ethylbenzene	3.2E-05	3.97E-05	7.05E-03	0.005	0.256	0.026
Ethylene Dibromide		4.43E-05		0.006	0.079	0.008
Fluoranthene		1.11E-06		0.000	0.002	0.000
Fluorene		5.67E-06		0.001	0.010	0.001
Formaldehyde	7.1E-04	5.28E-02	1.56E-01	7.302	98.090	9.809
Methanol		2.50E-03		0.346	4.450	0.445
Methylene Chloride		2.00E-05		0.003	0.036	0.004
n-Hexane		1.11E-03		0.154	1.976	0.198
Naphthalene	1.3E-06	7.44E-05	2.86E-04	0.010	0.140	0.014
PAHs	2.2E-06	2.69E-05	4.85E-04	0.004	0.061	0.006
Phenanthrene		1.04E-05		0.001	0.019	0.002
Phenol		2.40E-05		0.003	0.043	0.004
Propylene Oxide	2.9E-05		6.39E-03		0.168	0.017
Pyrene		1.36E-06		0.000	0.002	0.000
Styrene		2.36E-05		0.003	0.042	0.004
Tetrachloroethane		2.48E-06		0.000	0.004	0.000
Toluene	1.3E-04	4.08E-04	2.86E-02	0.056	1.479	0.148
Vinyl Chloride		1.49E-05		0.002	0.027	0.003
Xylene	6.4E-05	1.84E-04	1.41E-02	0.025	0.698	0.070
				Max. individual HAP	98.09	9.81
				Total HAPs	134.45	13.44

Emission Factor Source:

* EPA AP-42, Table 3.1-3, (4/2000)

‡ EPA AP-42, Table 3.2-2, (7/2000)

\+ Controlled emissions account for 90% reduction of HAPs due to the use of an oxidation catalyst of the exhaust.