

Table 4A

Queens Fresh Meadows Facility  
67-10 192nd St., Flushing, NY 11365

PTE and Maximum Annual Fuel Consumption Emissions

Boilers - Natural Gas		PTE	MMBtu/hr	Actual	#REF!	
		160		286.778		
Compound	CAS No.	Emission Factor <sup>1</sup> (lb/10 <sup>6</sup> scf)	Potential to Emit (lb/yr) <sup>2</sup>	Potential to Emit (tpy) <sup>2</sup>	Actual Emissions (lb/yr) <sup>3</sup>	Actual Emissions (tpy) <sup>3</sup>
PM	NY075-00-0	7.6	10469	5.23	2180	1.09
PM-2.5	NY075-02-5	1.9	2617	1.31	545	0.27
PM-10	NY075-00-5	5.7	7852	3.93	1635	0.82
NOx <sup>4</sup>	NY210-00-0	100	137755	68.88	28678	14.34
CO	00630-08-0	84	115714	57.86	24089	12.04
CO2	00124-38-9	120,000	165306353	82,653	34413412	17,207
SO2	07446-09-5	0.6	827	0.41	172	0.09
VOC	NY998-00-0	5.5	7577	3.79	1577	0.79
Total HAPs*	-	-	2601	1.30	542	0.27
2-Methylnaphthalene*	00091-57-6	2.40E-05	0.033	1.65E-05	0	3.44E-06
Acenaphthene*	00083-32-9	1.80E-06	0.002	1.24E-06	0	2.58E-07
Acenaphthylene*	00203-96-8	1.80E-06	0.002	1.24E-06	0	2.58E-07
Anthracene*	00120-12-7	2.40E-06	0.003	1.65E-06	0	3.44E-07
Arsenic*	07440-38-2	2.00E-04	0.276	1.38E-04	0	2.87E-05
Barium	07440-39-3	4.40E-03	6	3.03E-03	1	6.31E-04
Benzene*	00071-43-2	2.10E-03	3	1.45E-03	1	3.01E-04
Benzo(a)anthracene*	00056-55-3	1.80E-06	0.002	1.24E-06	0	2.58E-07
Benzo(a)pyrene*	00050-32-8	1.20E-06	0.002	8.27E-07	0	1.72E-07
Benzo(b,k)fluoranthene*	00205-99-2	1.80E-06	0.002	1.24E-06	0	2.58E-07
Benzo(g,h,i)perylene*	00191-24-2	1.20E-06	0.002	8.27E-07	0	1.72E-07
Beryllium*	07440-41-7	1.20E-05	0.017	8.27E-06	0	1.72E-06
Butane	00106-97-8	2.10E+00	2893	1.45	602	0.30
Cadmium*	07440-43-9	1.10E-03	2	7.58E-04	0	1.58E-04
Chromium*	07440-47-3	1.40E-03	2	9.64E-04	0	2.01E-04
Chrysene	00218-01-9	1.80E-06	0.0	1.24E-06	0	2.58E-07
Cobalt*	07440-48-4	8.40E-05	0.1	5.79E-05	0	1.20E-05
Copper	07440-50-8	8.50E-04	1	5.85E-04	0	1.22E-04
Dibenzo(a,h)anthracene*	00053-70-3	1.20E-06	0	8.27E-07	0	1.72E-07
Dichlorobenzene*	25321-22-6	1.20E-03	2	8.27E-04	0	1.72E-04
Ethane	00074-84-0	3.10E+00	4270	2.14	889	0.44
Fluoranthene*	00206-44-0	3.00E-06	0.004	2.07E-06	0	4.30E-07
Fluorene*	00086-73-7	2.80E-06	0.004	1.93E-06	0	4.01E-07
Formaldehyde*	00050-00-0	7.50E-02	103.32	0.05	22	1.08E-02
Hexane*	00110-54-3	1.80E+00	2480	1.24	516	0.26
Indeno(1,2,3-cd)pyrene*	00193-39-5	1.80E-06	0.0	1.24E-06	0	2.58E-07
Lead*	07439-92-1	5.00E-04	0.7	3.44E-04	0.143	7.17E-05
Manganese*	07439-96-5	3.80E-04	0.5	2.62E-04	0	5.45E-05
Mercury*	07439-97-6	2.60E-04	0.4	1.79E-04	0	3.73E-05
Methane	00074-82-8	2.30E+00	3168	1.58	660	0.33
Molybdenum	07439-98-7	1.10E-03	2	7.58E-04	0	1.58E-04
Naphthalene*	00091-20-3	6.10E-04	0.8	4.20E-04	0	8.75E-05
Nickel*	07440-02-0	2.10E-03	3	1.45E-03	1	3.01E-04
Nitrous Oxide	10024-97-2	6.40E-01	882	0.44	184	0.09
Pentane	00109-66-0	2.60E+00	3582	1.79	746	0.37
Phenanthrene*	00085-01-8	1.70E-05	0.0	1.17E-05	0	2.44E-06
Propane	00074-98-6	1.60E+00	2204	1.10	459	0.23

Table 4A-Boilers Natural Gas

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PTE and Maximum Annual Fuel Consumption Emissions

Boilers - Natural Gas		PTE 160	MMBtu/hr	Actual 286.778	#REF!	
Compound	CAS No.	Emission Factor <sup>1</sup> (lb/10 <sup>6</sup> scf)	Potential to Emit (lb/yr) <sup>2</sup>	Potential to Emit (tpy) <sup>2</sup>	Actual Emissions (lb/yr) <sup>3</sup>	Actual Emissions (tpy) <sup>3</sup>
Pyrene*	00129-00-0	5.00E-06	0.007	3.44E-06	0	7.17E-07
Selenium*	07782-49-2	2.40E-05	0.03	1.65E-05	0	3.44E-06
Toluene*	00108-88-3	3.40E-03	5	2.34E-03	1	4.88E-04
Vanadium	07440-62-2	2.30E-03	3	1.58E-03	1	3.30E-04
Zinc	07440-66-6	2.90E-02	40	2.00E-02	8	4.16E-03

Notes:

- \* Hazardous Air Pollutants (HAPs); Total HAPs is the sum of all HAP compounds.
- <sup>1</sup> Source: USEPA AP-42; Section 1.4 Natural Gas Combustion.
- <sup>2</sup> Potential emissions based on annual operation of 8 boilers for 8,760 hours per year.
- <sup>3</sup> Actual emissions based on maximum nat'l gas fuel consumption for years 2011 through 2021
- <sup>4</sup> NOx emission factor is based on uncontrolled - emission factor :  
100 lbs NOx per million cubic feet natural gas fired.