

Appendix 4-A: Updated Tables from the DEIS

Table 4-1 (Revised): Summary of Primary Federal and State Ambient Air Quality Standards

Pollutant	Averaging Period	Ambient Air Quality Standards	
		NAAQS ($\mu\text{g}/\text{m}^3$) ^a	NYAAQS ($\mu\text{g}/\text{m}^3$) ^a
SO ₂	1-hour	196 ^c	none ^c
	3-hour	Revoked	1,300
	24-hour	Revoked	365
	Annual	80	80
PM ₁₀	24-hour	150	None
	Annual	revoked	None
PM _{2.5}	24-hour	35	None
	Annual	15	None
Total Suspended Particulate	24-hour	None	250
	Annual	None	45
CO	1-hour	40,000	40,000
	8-hour	10,000	10,000
NO ₂	1-hour	188 ^d	None ^d
	Annual	100	100
Lead	3-month	0.15	None
Fluorine ^b	12-hour	None	3.70
	24-hour	None	2.85
	1-week	None	1.65
	1-month	None	0.80
Beryllium	1-month	None	0.01
Hydrogen Sulfide (H ₂ S)	1-hour	None	14
<p>a) micrograms per cubic meter.</p> <p>b) This pollutant will not be emitted from the proposed project.</p> <p>c) The new 1-hour standard for SO₂ took effect on June 2, 2010. The ruling revokes the 3-hour and 24-hour SO₂ standards. The new standard has not yet been incorporated into NYSDEC air regulations.</p> <p>d) The new 1-hour standard for NO₂ took effect on January 22, 2010. The new standard has not yet been incorporated into NYSDEC air regulations.</p>			

Table 4-30 (Revised): Maximum Predicted Non-Criteria Pollutant Annual Impacts

Air Toxic Compound	Maximum Projected Impacts ($\mu\text{g}/\text{m}^3$)					AGC ($\mu\text{g}/\text{m}^3$)
	Turbines + Duct Burner	Auxiliary Boiler	Fire Pump	Black-Start Generators	Total	
1,3-Butadiene	2.70E-05	0.00E+00	5.84E-06	0.00E+00	3.28E-05	3.30E-02
2-Methylnaphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.10E+00
Acetaldehyde	2.51E-03	0.00E+00	1.15E-04	1.55E-05	2.64E-03	4.50E-01
Acrolein	4.02E-04	0.00E+00	1.38E-05	4.84E-06	4.20E-04	3.50E-01
Anthracene	2.52E-08	1.81E-08	2.79E-07	7.55E-06	7.88E-06	2.00E-02
Ammonia	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+02
Benzene	7.75E-04	1.58E-05	1.39E-04	4.77E-04	1.41E-03	1.30E-01
Benzo(a)anthracene	1.89E-08	1.36E-08	2.51E-07	3.82E-07	6.65E-07	2.00E-02
Benzo(a)pyrene	1.26E-08	9.05E-09	0.00E+00	1.58E-07	1.79E-07	9.10E-04
Butane	2.20E-02	1.58E-02	0.00E+00	0.00E+00	3.79E-02	5.70E+04
Chrysene	1.89E-08	1.36E-08	5.27E-08	9.40E-07	1.02E-06	2.00E-02
Dibenz(a,h)anthracene	1.26E-08	9.05E-09	8.71E-08	2.13E-07	3.21E-07	2.00E-02
Ethane	3.25E-02	2.34E-02	0.00E+00	0.00E+00	5.59E-02	2.90E+03
Ethylbenzene	2.01E-03	0.00E+00	0.00E+00	0.00E+00	2.01E-03	1.00E+03
Formaldehyde	7.69E-03	5.66E-04	1.76E-04	4.85E-05	8.48E-03	6.00E-02
Hexane	4.83E-05	3.47E-05	0.00E+00	0.00E+00	8.30E-05	7.00E+02
Naphthalene	8.80E-05	4.60E-06	1.27E-05	7.98E-05	1.85E-04	3.00E+00
Pentane	2.73E-02	1.96E-02	0.00E+00	0.00E+00	4.69E-02	4.20E+03
Phenanthrene	1.78E-07	1.28E-07	4.39E-06	2.51E-05	2.98E-05	2.00E-02
Polycyclic aromatic hydrocarbons	1.39E-04	5.90E-07	2.51E-05	1.30E-04	2.95E-04	2.00E-02
Propane	1.68E-02	1.21E-02	0.00E+00	0.00E+00	2.89E-02	4.30E+04
Propylene	0.00E+00	0.00E+00	3.85E-05	1.71E-03	1.75E-03	3.00E+03
Propylene Oxide	1.82E-03	0.00E+00	0.00E+00	0.00E+00	1.82E-03	2.70E-01
Pyrene	5.25E-08	3.77E-08	7.14E-07	2.28E-06	3.08E-06	2.00E-02
Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.00E+00
Toluene	8.19E-03	2.56E-05	6.11E-05	1.73E-04	8.45E-03	5.00E+03
Xylene (Total)	4.02E-03	0.00E+00	4.26E-05	1.19E-04	4.18E-03	1.00E+02
Arsenic	2.10E-06	1.51E-06	0.00E+00	0.00E+00	3.61E-06	2.30E-04
Barium	4.62E-05	3.32E-05	0.00E+00	0.00E+00	7.94E-05	5.00E-01
Beryllium	1.26E-07	9.05E-08	0.00E+00	0.00E+00	2.16E-07	4.20E-04
Cadmium	1.15E-05	8.29E-06	0.00E+00	0.00E+00	1.98E-05	2.40E-04
Chromium	1.47E-05	1.06E-05	0.00E+00	0.00E+00	2.52E-05	4.50E+01
Cobalt	8.82E-07	6.33E-07	0.00E+00	0.00E+00	1.51E-06	1.00E-03
Copper	8.92E-06	6.41E-06	0.00E+00	0.00E+00	1.53E-05	2.00E-02
Manganese	3.99E-06	2.87E-06	0.00E+00	0.00E+00	6.85E-06	5.00E-02
Mercury	2.73E-06	1.96E-06	0.00E+00	0.00E+00	4.69E-06	3.00E-01
Molybdenum	1.15E-05	8.29E-06	0.00E+00	0.00E+00	1.98E-05	1.20E+00
Nickel	2.20E-05	1.58E-05	0.00E+00	0.00E+00	3.79E-05	4.20E-03
Selenium	2.52E-07	1.81E-07	0.00E+00	0.00E+00	4.33E-07	2.00E+01
Vanadium	2.41E-05	1.73E-05	0.00E+00	0.00E+00	4.15E-05	2.00E-01
Zinc	3.04E-04	2.19E-04	0.00E+00	0.00E+00	5.23E-04	4.50E+01

Table 4-31 (Revised): Maximum Predicted Non-Criteria Pollutant Short-Term Impacts

Air Toxic Compound	Maximum Projected Impacts (µg/m ³)					SGC (µg/m ³)
	Turbines + Duct Burner	Auxiliary Boiler	Fire Pump	Black-Start Generators	Total	
1,3-Butadiene	1.95E-03	0.00E+00	4.01E-03	0.00E+00	5.96E-03	
2-Methylnaphthalene	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	
Acetaldehyde	1.81E-01	0.00E+00	7.87E-02	1.01E-02	2.70E-01	4.50E+03
Acrolein	2.90E-02	0.00E+00	9.49E-03	3.16E-03	4.16E-02	2.50E+00
Anthracene	1.82E-06	1.51E-06	1.92E-04	4.94E-03	5.14E-03	
Ammonia	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E+03
Benzene	5.59E-02	1.32E-03	9.58E-02	3.12E-01	4.65E-01	1.30E+03
Benzo(a)anthracene	1.36E-06	1.13E-06	1.72E-04	2.50E-04	4.25E-04	
Benzo(a)pyrene	9.09E-07	7.55E-07	0.00E+00	1.03E-04	1.05E-04	
Butane	1.59E+00	1.32E+00	0.00E+00	0.00E+00	2.91E+00	
Chrysene	1.36E-06	1.13E-06	3.62E-05	6.14E-04	6.53E-04	
Dibenz(a,h)anthracene	9.09E-07	7.55E-07	5.98E-05	1.39E-04	2.00E-04	
Ethane	2.35E+00	1.95E+00	0.00E+00	0.00E+00	4.30E+00	
Ethylbenzene	1.45E-01	0.00E+00	0.00E+00	0.00E+00	1.45E-01	5.40E+04
Formaldehyde	5.55E-01	4.72E-02	1.21E-01	3.17E-02	7.55E-01	3.00E+01
Hexane	3.48E-03	2.89E-03	0.00E+00	0.00E+00	6.38E-03	
Naphthalene	6.35E-03	3.84E-04	8.70E-03	5.22E-02	6.76E-02	7.90E+03
Pentane	1.97E+00	1.64E+00	0.00E+00	0.00E+00	3.61E+00	
Phenanthrene	1.29E-05	1.07E-05	3.02E-03	1.64E-02	1.94E-02	
Polycyclic aromatic hydrocarbons	1.00E-02	4.93E-05	1.72E-02	8.51E-02	1.12E-01	
Propane	1.21E+00	1.01E+00	0.00E+00	0.00E+00	2.22E+00	
Propylene	0.00E+00	0.00E+00	2.65E-02	1.12E+00	1.15E+00	
Propylene Oxide	1.31E-01	0.00E+00	0.00E+00	0.00E+00	1.31E-01	3.10E+03
Pyrene	3.79E-06	3.15E-06	4.91E-04	1.49E-03	1.99E-03	
Sulfuric Acid	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+02
Toluene	5.91E-01	2.14E-03	4.20E-02	1.13E-01	7.48E-01	3.70E+04
Xylene (Total)	2.90E-01	0.00E+00	2.92E-02	7.75E-02	3.97E-01	4.30E+03
Arsenic	1.52E-04	1.26E-04	0.00E+00	0.00E+00	2.77E-04	
Barium	3.33E-03	2.77E-03	0.00E+00	0.00E+00	6.10E-03	
Beryllium	9.09E-06	7.55E-06	0.00E+00	0.00E+00	1.66E-05	
Cadmium	8.33E-04	6.92E-04	0.00E+00	0.00E+00	1.53E-03	
Chromium	1.06E-03	8.81E-04	0.00E+00	0.00E+00	1.94E-03	
Cobalt	6.36E-05	5.29E-05	0.00E+00	0.00E+00	1.16E-04	
Copper	6.44E-04	5.35E-04	0.00E+00	0.00E+00	1.18E-03	1.00E+02
Manganese	2.88E-04	2.39E-04	0.00E+00	0.00E+00	5.27E-04	
Mercury	1.97E-04	1.64E-04	0.00E+00	0.00E+00	3.61E-04	6.00E-01
Molybdenum	8.33E-04	6.92E-04	0.00E+00	0.00E+00	1.53E-03	
Nickel	1.59E-03	1.32E-03	0.00E+00	0.00E+00	2.91E-03	6.00E+00
Selenium	1.82E-05	1.51E-05	0.00E+00	0.00E+00	3.33E-05	
Vanadium	1.74E-03	1.45E-03	0.00E+00	0.00E+00	3.19E-03	
Zinc	2.20E-02	1.83E-02	0.00E+00	0.00E+00	4.02E-02	

