

2001 Stack Test Data - Onondaga County, NY, Resource Recovery Facility

>>> Testing performed July 10-20, 2001	Average Measured Emissions			Permit	% of	Pass/
Constituent	Unit 1	Unit 2	Unit 3	Limit ¹	Limit ²	Fail?
					Facility Ave	(P/F)
Particulates (gr/dscf @ 7% O ₂)	0.00105	0.000334	0.000708	0.010	7.0	P
Sulfur Dioxide (ppmdv @ 7% O ₂)	0.05	0.60	0.00	30	0.7	P
Sulfur Dioxide (lb/hr)	0.02	0.24	0.00	16.2	0.5	P
Sulfur Dioxide Removal Efficiency (%)	99.9	99.4	100.0	85 (min)		P
Nitrogen Oxides (ppmdv @ 7% O ₂)	162	172	163	180	92.0	P
Nitrogen Oxides (lb/hr)	46.5	49.8	47.9	58	82.9	P
Carbon Monoxide (ppmdv @ 7% O ₂)	12.2	12.2	11.3	45	26.4	P
Carbon Monoxide (lb/hr)	2.1	2.2	2.0	8.04	26.1	P
Total Hydrocarbons (ppmdv @ 7% O ₂)	0.36	0.00	0.52	30	1.0	P
Total Hydrocarbons (lb/hr)	0.10	0.00	0.15	2.76	3.0	P
Sulfuric Acid Mist (lb/hr)	0.690	0.335	0.183	1.69	23.8	P
Hydrogen Fluoride (lb/hr)	0.00687	0.00760	0.00708	0.165	4.4	P
Polychlorinated Dibenzo-p-Dioxins and Furans						
(ng/dscm @ 7% O ₂) - Total	0.227	0.745	1.19	30	2.4	P
(ug/dscm @ 7% O ₂) - NY TEFs	5.98E-06	9.89E-06	1.52E-05	0.001	1.0	P
(lb/hr) - NY TEFs	9.62E-10	1.48E-09	2.29E-09	1.29E-07	1.2	P
Hydrogen Chloride (ppmdv @ 7% O ₂)	1.69	1.25	1.42	25	5.8	P
Hydrogen Chloride (lb/hr)	0.35	0.29	0.32	5.24	6.1	P
HCl Removal Efficiency (%)	99.7	99.8	99.8	95 (min)		P
Ammonia (ppmdv @ 7% O ₂)	3.10	5.98	4.05	50	8.8	P
Ammonia (lb/hr)	0.30	0.66	0.43	4.88	9.5	P
Arsenic (lb/hr)	1.34E-04	8.30E-05	1.24E-04	7.80E-04	14.6	P
Beryllium (lb/hr)	9.79E-06	1.02E-05	9.88E-06	1.15E-05	86.6	P
Cadmium (lb/hr)	1.53E-04	8.79E-05	1.81E-04	1.90E-03	7.4	P
Chromium (lb/hr)	2.12E-04	2.73E-04	1.20E-04	1.93E-03	10.4	P
Copper (lb/hr)	4.50E-04	1.98E-04	4.44E-04	4.00E-03	9.1	P
Lead (lb/hr)	2.53E-03	1.54E-03	2.48E-03	3.81E-02	5.7	P
Manganese (lb/hr)	3.49E-04	3.41E-04	2.55E-04	2.70E-01	0.1	P
Nickel (lb/hr)	3.16E-04	1.81E-04	6.96E-05	5.00E-03	3.8	P
Vanadium (lb/hr)	1.34E-05	2.05E-05	2.01E-05	6.00E-04	3.0	P
Zinc (lb/hr)	1.30E-02	6.68E-03	1.04E-02	1.88E-02	53.3	P
Mercury (ug/dscm @ 7% O ₂)	2.39	0.77	2.02	80	2.2	P
Mercury (lb/hr)	0.000354	0.000116	0.000291	0.012	2.1	P
Mercury Removal Efficiency (%)	97.6	99.1	98.6	85 (min)		P
PM ₁₀ (gr/dscf @ 7% O ₂)	0.000631	0.000272	0.000505	0.010	4.7	P
PM ₁₀ (lb/hr)	0.237	0.104	0.187	3.16	5.6	P
Polychlorinated Biphenyls (PCBs)						
(ug/dscm @ 7% O ₂)	0.000498	0.00544	0.0105	2.3	0.2	P
(lb/hr)	8.00E-07	8.08E-07	1.59E-06	3.20E-04	0.3	P
Polycyclic Aromatic Hydrocarbons (PAHs)						
(ug/dscm @ 7% O ₂)	0.159	0.598	0.287	1.0	34.8	P
(lb/hr)	0.0000256	0.0000893	0.0000446	0.00014	38.0	P
Formaldehyde (ug/dscm @ 7% O ₂)	24.2	25.3	29.5	50	52.7	P
Formaldehyde (lb/hr)	0.00567	0.00603	0.00656	0.95	0.6	P
Hexavalent Chromium (lb/hr)	0.0000143	0.0000142	0.0000137	0.0004	3.5	P

¹ Permit limits obtained from Ogden Martin Systems, Inc. New York State Department of Environmental Conservation permit number 7-3142-00028/00002-0

² Calculated as the average of the three unit test runs (each unit result is an average of three replicate test runs) over the Permit limit expressed as a percent

Units:
 gr/dscf = grains per dry standard cubic foot all volumetric test results are reported at 7% oxygen (Q)
 ppmdv = parts per million dry volume min = minimum permit limit percentage
 lb/hr = pounds per hour E = test result expressed in scientific notation (base 10)
 ng/dscm = nanograms (billionth's of a gram) per dry standard cubic meter
 ug/dscm = micrograms (millionth's of a gram) per dry standard cubic meter