

## ONONDAGA COUNTY RESOURCE RECOVERY FACILITY 2009 ANNUAL STACK TEST RESULTS

	Constituent	Average Measured Emissions <sup>1</sup>			Permit Limit <sup>2</sup>	Pass/Fail? P/F	
		Unit 1	Unit 2	Unit 3			
TESTED ANNUALLY	FEDERAL	Cadmium (mg/dscm @ 7% O <sub>2</sub> )	5.37E-04	5.93E-04	3.55E-04	3.50E-02	P
		Cadmium (lb/hr)	7.95E-05	9.09E-05	5.71E-05	1.90E-03	P
		Carbon Monoxide (lb/hr)	9.40E-01	9.80E-01	1.14E+00	8.04E+00	P
		Dioxins/Furans (ng/dscm @ 7% O <sub>2</sub> )	2.45E-01	1.17E+00	2.96E+00	3.00E+01	P
		Hydrogen Chloride (ppmdv @ 7% O <sub>2</sub> )	1.90E+00	3.60E+00	5.79E+00	2.50E+01	P
		Hydrogen Chloride (lb/hr)	4.14E-01	8.71E-01	1.41E+00	5.24E+00	P
		Hydrogen Chloride Removal Efficiency (%)	99.7	99.5	99.3	>=95	P
		Lead (mg/dscm @ 7% O <sub>2</sub> )	8.72E-03	9.55E-03	4.73E-03	4.00E-01	P
		Lead (lb/hr)	1.30E-03	1.47E-03	7.62E-04	3.81E-02	P
		Mercury (lb/hr)	1.10E-04	< 9.99E-05	< 6.98E-05	4.00E-03	P
		Nitrogen Oxides (lb/hr)	4.91E+01	5.49E+01	5.57E+01	5.80E+01	P
		Particulates (gr/dscf @ 7% O <sub>2</sub> )	1.38E-03	9.59E-04	9.93E-04	1.00E-02	P
		PM <sub>10</sub> (gr/dscf @ 7% O <sub>2</sub> )	2.11E-04	4.08E-04	2.63E-04	1.00E-02	P
		PM <sub>10</sub> (lb/hr)	7.90E-02	1.51E-01	1.03E-01	3.16E+00	P
		Sulfur Dioxide (lb/hr)	1.91E+00	3.85E+00	2.20E+00	1.62E+01	P
STATE	Ammonia (ppmdv @ 7% O <sub>2</sub> )	1.00E+00	5.42E-01	2.02E+00	5.00E+01	P	
	Ammonia (lb/hr)	1.02E-01	6.09E-02	2.28E-01	4.88E+00	P	
	Dioxins/Furans-2,3,7,8 TCDD TEQ (ng/dscm @ 7% O <sub>2</sub> )	2.45E-03	1.09E-02	3.01E-02	4.00E-01	P	
	Dioxins/Furans-2,3,7,8 TCDD TEQ (lb/hr)	4.18E-10	1.74E-09	4.86E-09	1.29E-07	P	
	Mercury (µg/dscm @ 7% O <sub>2</sub> )	7.42E-01	< 6.28E-01	< 4.34E-01	2.80E+01	P	
	Mercury Removal Efficiency (%)	99.5	> 99.5	> 99.6	>=85	P	
	Zinc (lb/hr)	8.36E-03	7.53E-03	5.37E-03	1.88E-02	P	

**NOTES:**

<sup>1</sup> Based on three test runs

<sup>2</sup> NYSDEC Title V Permit #7-3142-00028/00009 - Draft Renewal

**UNITS:**

gr/dscf = grains per dry standard cubic foot

ppmdv = parts per million dry volume

lb/hr = pounds per hour

ng/dscm = nanograms per dry standard cubic meter

µg/dscm = micrograms per dry standard cubic meter

mg/dscm = milligrams per dry standard cubic meter

@ 7% O<sub>2</sub> = concentration corrected to 7% oxygen

### 2009 ASH RESIDUE CHARACTERIZATION TEST RESULTS

<u>Semi-Annual Test Results - May 2009</u>			
Constituent	Test Result	Permit Limit	Pass or Fail
Cadmium	0.73 mg/L	1 mg/L	Pass
Lead	0.55 mg/L	5 mg/L	Pass
<b><u>Conclusion</u></b>			
<i>Ash residue does NOT exhibit a hazardous characteristic. As such, it should continue to be managed as a non-hazardous solid waste.</i>			