

2023 Air Emissions Testing FAQs

Q: What is the purpose of annual air emissions “stack” testing?

A: Stack testing is an important tool that measures the amount of regulated pollutants being emitted from a facility. Stack testing consists of a series of sampling events, in which a probe is inserted into the stack to collect a representative sample of the gases released, over a defined amount of time. Sampling and laboratory analysis must be conducted in accordance with New York State Department of Environmental Conservation (NYSDEC) and United States Environmental Protection Agency (USEPA) protocols. **NYSDEC oversees, and is generally onsite during stack testing at the WTE Facility.**

Q: How do the 2023 stack test results look?

A: The results from the 2023 stack testing indicate that the Facility is operating acceptably and that the air pollution control devices are functioning properly. As shown by the following graph, many of the tested constituents were considerably below the permit limit.

Q: Does the Facility conduct any other air emissions testing besides the annual stack testing?

A: Yes. The Facility has a continuous emission monitoring system (CEMS) that measures combustion efficiency, air pollution equipment performance and stack emissions. The CEMS monitors carbon monoxide, carbon dioxide, oxygen, sulfur dioxide, and nitrogen oxides (NOx) as well as opacity and combustion temperatures. The CEMS was recently expanded to also monitor mercury and hydrogen chloride.

Q: What is the status of the WTE Facility’s Air (Title V) Permit?

A: The WTE Facility’s Air Permit was most recently issued on January 25, 2021 and expires January 24, 2026. The permit can be accessed on NYSDEC’s website at [this webpage](#).

Q: Who can I contact for more information?

A: For more detailed information on the test results please contact OCRRA’s Director of Engineering, Cristina Albuio, at 315.295.0743 or calbuio@ocrra.org.

2023 ANNUAL STACK TEST RESULTS

	Constituent	Average Measured Emissions ¹			Permit	Pass/Fail	3-Boiler	% Permit	
		Unit 1	Unit 2	Unit 3	Limit ²	P/F	Average	Limit ³	
TESTED ANNUALLY	FEDERAL	Cadmium (mg/dscm @ 7% O ₂)	0.000196	0.000183	0.000325	0.035	P	0.000235	1%
		Cadmium (lb/hr)	0.0000309	0.0000278	0.0000586	0.0019	P	0.0000391	2%
		Carbon Monoxide (lb/hr)	1.83	1.37	3.17	8.04	P	2.12	26%
		Dioxins/Furans (ng/dscm @ 7% O ₂)	6.550	5.060	0.951	30	P	4.19	14%
		Hydrogen Chloride (ppmdv @ 7% O ₂)	4.21	2.80	3.14	25	P	3.38	14%
		Hydrogen Chloride (lb/hr)	1.00	0.643	0.855	5.24	P	0.833	16%
		Hydrogen Chloride Removal Efficiency (%)	99.1	99.4	99.4	≥ 95	P	99.3	--
		Lead (mg/dscm @ 7% O ₂)	0.00207	0.00213	0.00377	0.400	P	0.002657	1%
		Lead (lb/hr)	0.000327	0.000325	0.000678	0.0381	P	0.0004433	1%
		Mercury (lb/hr)	0.000106	0.000126	0.000155	0.004	P	0.0001290	3%
		Nitrogen Oxides (lb/hr)	50.0	48.7	47.9	58	P	48.9	84%
		Particulate (gr/dscf @ 7% O ₂)	0.000918	0.000688	0.000766	0.010	P	0.000791	8%
		PM ₁₀ (gr/dscf @ 7% O ₂)	0.000397	0.000345	0.000308	0.010	P	0.000350	4%
		PM ₁₀ , Filterable (lb/hr)	0.129	0.112	0.118	3.16	P	0.120	4%
		Sulfur Dioxide (lb/hr)	0.0400	0.0279	0.0278	16.2	P	0.0319	0%
		STATE	Ammonia (ppmdv @ 7% O ₂)	0.562 <	0.605	0.601	50	P	0.589
Ammonia (lb/hr)	0.0624 <		0.0649	0.0766	4.88	P	0.0680	1%	
Dioxins/Furans-2,3,7,8 TCDD TEQ (ng/dscm @ 7% O ₂)	0.0855		0.0801	0.00779	0.4	P	0.057797	14%	
Dioxins/Furans-2,3,7,8 TCDD TEQ (lb/hr)	0.0000000135		0.0000000127	0.0000000137	0.000000129	P	0.0000000919	7%	
Mercury (µg/dscm @ 7% O ₂)	0.671		0.830	0.854	28	P	0.785	3%	
Mercury Removal Efficiency (%)	97.1		97.8	95.0	≥ 85	P	96.6	--	

NOTES:

¹ Based on 3 test runs for each unit; used for compliance with permit limit.

² NYSDEC Title V Permit #7-3142-00028/00009

³ Based on 3-Boiler Average; informational only; not used for compliance.

UNITS:

gr/dscf = grains per dry standard cubic foot

ppmdv = parts per million dry volume

lb/hr = pounds per hour

dscm = dry standard cubic meter

@ 7% O₂ = concentration corrected to 7% oxygen

ng = nanograms

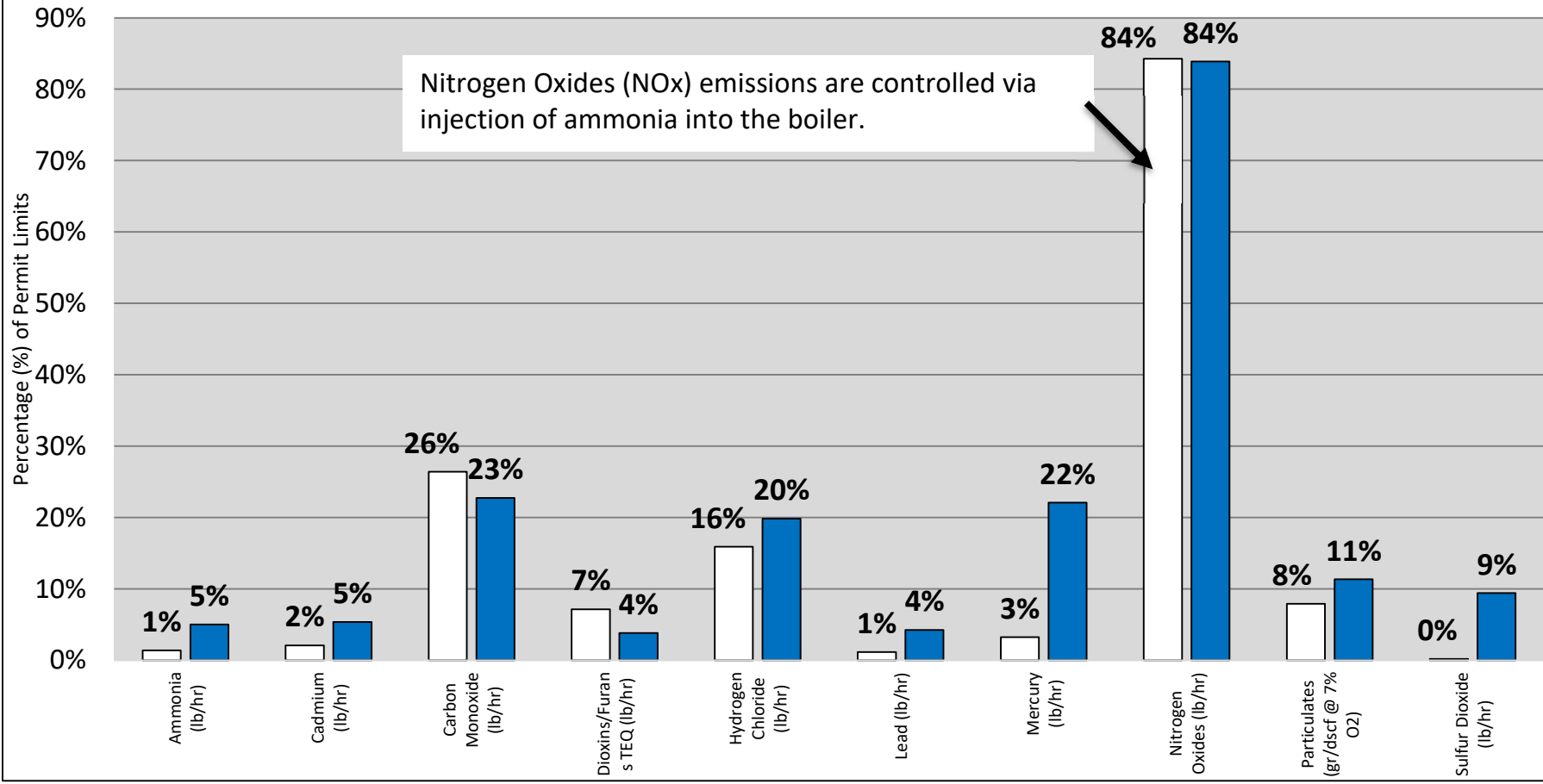
µg = micrograms

mg = milligrams

Waste-to-Energy Facility Air Emissions as a Percentage of the Facility Permit Limits (Average of 3 Boiler Units)

□ 2023 Air Emissions Results

■ 29-Year Facility Average Results



Facility Mercury Emissions & Air Pollution Control System Effectiveness

