



REGION 1

BOSTON, MA 02109

Clean Air Act Inspection Report

Report Date: April 8, 2025

I. Background

Inspection Date: March 25, 2025

Inspection Type: Partial Compliance Evaluation

EPA Inspector: Davianna Vasconcelos, Enforcement and Compliance Assurance Division, Air Compliance Section

DAVIANNA

VASCONCELOS

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VASCONCELOS

Date: 2025.04.08 16:29:09
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EPA Reviewer: John Melcher, Senior Enforcement Coordinator, Air Compliance Section

JOHN MELCHER

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MELCHER

Date: 2025.04.08 16:34:31 -04'00'

Facility Name: Wheelabrator Resource Recovery Facility

ICIS Air ID#: NH0000003301300102

Facility Location: 11 Whitney Road, Concord, NH 03301

Mailing Address: Same as above

Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Small Business Resources Information Sheet:

Without making a determination that your business or organization is a small business, EPA is providing you with this Small Business Resource Information Sheet regarding information that may assist small businesses in identifying and complying with environmental requirements:

<https://www.epa.gov/sites/default/files/2017-06/documents/smallbusinessinfo.pdf>

Inspection Attendees:

Name	Title	Organization
Davianna Vasconcelos	Environmental Engineer	EPA R1
Barbara Dorfschmidt	Senior Compliance Inspector	NH DES
David Cribbie	Air Quality Manager	WIN Waste Innovations
Kevin Wing	Plant Manager	WIN Waste Innovations
Gabrielle Hughes	Operations Technician	WIN Waste Innovations
Kevin Beauregard	Compliance Manager	WIN Waste Innovations
Matt Hughes	Director of Environmental Compliance	WIN Waste Innovations

Facility/Process Description:

From the State-Issued Title V Operating Permit issued January 24, 2019:

Wheelabrator Concord Company, L.P. (Wheelabrator) operates two large municipal waste combustors (MWC) in Concord, New Hampshire. Wheelabrator burns municipal solid waste (MSW) in two identical mass burn waterwall boilers to generate steam. Each boiler is equipped with two auxiliary propane-fired burners. A single steam driven turbine/generator is 16 MW.

The two large MWC units are subject to Section 129(e) of the 1990 Clean Air Act Amendments and the facility, therefore, requires a Title V Operating Permit. The facility is also a major source of nitrogen oxides (NO_x), carbon monoxide (CO) and hazardous air pollutant (HAP) emissions.

The MWC units are Babcock and Wilcox and were installed in 1988.

Potentially Applicable Federal Air Regulations:

The following federal air regulations may be applicable to the Facility:

- 40 CFR Part 60, Subpart Eb – Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996
- 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

State Air Permit:

- Title V Operating Permit issued January 24, 2019

Previous Enforcement Actions:

A “[Detailed Facility Report](#)” from EPA’s Enforcement and Compliance History Online (ECHO) database indicates that EPA has taken no informal or formal enforcement actions taken against Wheelabrator Resource Recovery Facility with respect to this facility in the past ten years.

II. Inspection

A. Opening Conference:

EPA inspector Davianna Vasconcelos arrived at the facility at approximately 9:25 a.m. and met David Cribbie, of WIN Waste Innovations, in the lobby. Mr. Cribbie led Ms. Vasconcelos to the conference room where she met Kevin Wing, Gabrielle Hughes, Kevin Beauregard, and Matt Hughes of WIN Waste Innovations. At approximately 9:30 a.m., Barbara Dorfschmidt, of the New Hampshire Department of Environmental Services (NH DES), arrived and initiated an opening conference. Ms. Vasconcelos explained the purpose for EPA’s visit was to conduct a partial compliance evaluation by supporting NH DES in their effort and gathering information about the facility. Ms. Vasconcelos presented her credential to all inspection attendees at approximately 9:39 a.m. Ms. Dorfschmidt explained the purpose of NH DES’s visit was to conduct a Title V inspection. Ms. Dorfschmidt explained that if any information should be considered confidential or proprietary to make inspectors aware of such.

Records Review

Mr. Wing and Mr. Hughes left the conference room to perform other duties while the rest of the group began the records review. The following records were reviewed electronically via a projector screen in the conference room unless otherwise noted:

- Training records – in accordance with the Permit Table 7 Item 2
 - Solid waste operator training spreadsheet
- Operating Manual Review – in accordance with the Permit Table 7 Item 3
 - Operating Plan sign offs – reviewed by new hires, annual renewal for employees
- Operating Plan PDF – EPA requested a copy be emailed
- Permit Deviations – in accordance with the Permit Table 7 Item 4 (described orally by Mr. Cribbie)
 - Two deviations
 - May 24, 2024 – high amounts of rain cause the ID fan tripped, possibly e-stop button shortened due to rain, CO elevated as result of event
 - Sept 3, 2023 – Unit 2, fabric filter inlet temp exceedance, pump pressure differential alteration caused temp
 - One malfunction
 - Malfunction Notification – DCS (destitution control system) server was being swapped to standby and the switch failed which caused a lost control of

combustion equipment, lasted about 2 hours, more details in the quarterly report

- Combustion Devices – in accordance with the Permit Table 7 Item 6
 - Emergency engines – operation hours spreadsheet; hour meter recorded monthly; fuel usage recorded monthly; ULSD
 - Fuel receipt – primary use is for on-site equipment (front loaders), bulk tank fuels equipment, fire pump has own tank, generator has own tank, all combined in fuel receipt (described orally by Mr. Cribbie)
- MWC Units
 - 2024 Annual Report (Draft) - amount of waste consumed - recorded by month, hours online, processed tons, tons/hour
- CEM Emission – in accordance with the Permit Table 7 Item 9
 - CEM – dedicated server for CEM data, EcoChem Analytical maintains, “CEMTrac3” program, real time data, reports – Compliance summary report Unit 1 Outlet, Opacity matrix report (initial calibration noted) Unit 1 and Unit 2
 - Rolling 8-hour steam flow limit - 68.9 Klbs/Hr (described orally by Mr. Cribbie but confirmed on screen)
 - Manual check CEM records, will manually overwrite data for malfunction/deviation timeframes, only David and Kevin have access CEM calibration report – all units (described orally by Mr. Cribbie)
- PC Maintenance and Repair
 - Bag house maintenance - fabric filter maintenance records – bag replacement via bag house opacity spike checks
- TabWare - maintenance system - purchasing, parts, inventory, and work completed - work order generated - broken down by asset, covers whole facility
- Feed flow meter - steam flow calibration once a year, most recent Unit 1 April 2024 and Unit 2 May 2024 (described orally by Mr. Cribbie)

The group continued the opening conference following the records review. Mr. Cribbie said that the facility was operating under normal conditions. Mr. Cribbie and Mr. Beauregard explained the information listed in the Number of Employees and Working Hours section of this report. Mr. Cribbie confirmed the facility NAICS code is 562213 Solid Waste Combustors and Incinerators.

Ms. Vasconcelos explained the inspection report process including the electronic delivery and asked who the inspection report should be sent to. Mr. Cribbie said the inspection report should be sent to Mr. Wing and others at the inspection can be copied.

Mr. Cribbie confirmed that the facility does not use emission reduction trading credits.

Mr. Cribbie explained that the facility uses selective non-catalytic reduction (SNCR) by using 50% urea as a chemical reagent. Mr. Cribbie explained that the urea injection is automatically injected with dilution water at a specific rate through injectors that were installed at optimal temperature range. Mr. Cribbie explained the SNCR is used to control NO_x at the outlet. Mr. Cribbie explained that ammonia slip measured annually during the facility stack testing, typically conducted in June.

Mr. Cribbie explained that facility scheduled downtime typically occurs in January, May, or August and maintenance and repairs are typically completed in three or four days depending on the scope of work.

B. Facility Tour

Mr. Cribbie and Mr. Beauregard led Ms. Vasconcelos and Ms. Dorfschmidt through the facility in the following order.

1. Crane and Pit Observation Deck

Ms. Vasconcelos observed one crane which was in operation. Mr. Cribbie explained the facility has two feed chutes, one for each unit. Ms. Vasconcelos observed multiple trucks unloading onto the pit floor. Mr. Cribbie explained the facility conducts daily preventative maintenance on the crane and the crane has never been replaced. Mr. Cribbie explained that routine maintenance for the crane would include changing the cables.

2. Distribution Panel Unit 1

Mr. Cribbie explained that the panel is part of the Selective Non-Catalytic Reduction (SNCR) system. Mr. Cribbie identified four lances on the south side of Unit 1 and said four lances were also on the north side, totaling eight lances for Unit 1. Mr. Cribbie explained that the lances atomize and inject urea and water into the system.

3. Distribution Panel Unit 2

Mr. Cribbie identified four lances on the north side of Unit 2 and said four lances were on the south side, totaling eight lances for Unit 2.

4. Control Room

Ms. Vasconcelos observed two operators in the control room, identified by their name tags as Tim and Josh. Mr. Cribbie explained each control screen and its purpose. Mr. Cribbie explained that currently SO₂ is being monitored at the inlet and outlet of the stack and the facility is considering removing the inlet monitor and using only the outlet monitor.

5. Furnace Unit 1 Viewing Window

Ms. Vasconcelos observed Unit 1 furnace through the viewing window and confirmed that it was in operation.

6. Furnace Unit 2 Viewing Window

Ms. Vasconcelos observed Unit 2 furnace through the viewing window and confirmed that it was in operation.

7. Exterior

Mr. Cribbie led the group to the exterior of the northeast side of the building and identified the lime silo, the emissions stack, and the economizer outlet.

8. CEM Shelter

Mr. Cribbie led the group into the CEM shelter that contained the CEM equipment.

9. Exterior

Mr. Cribbie led the group to the exterior of the building and identified the ID fan and its emergency stop button that could have been the reason for the May 24, 2024 deviation.

Mr. Cribbie led the group past the urea storage tank. Ms. Vasconcelos noted the tank sat on what appeared to be a concrete pad with a barrier wall. Ms. Vasconcelos noted the tank volume to be 6,000 gallons.

10. Urea Circulation Module

Mr. Cribbie led the group to the urea circulation module room.

11. Exterior

Mr. Cribbie led the group to the exterior of the southeast of the building and identified the cooling tower, the metal load out area for discarded ferrous metals to be removed from the site, and the fire water tank.

12. Fire Pump Room

Mr. Cribbie led the group to the fire pump room that houses the fire pump and the generator. Ms. Vasconcelos made the following notes:

Fire pump hours – 334.4

Generator

Hours – 739

WIN Waste Innovations personnel said that maintenance for the generator is contracted out

Engine Make: Caterpillar 3208

Engine Serial Number: 5YF00349

No year listed

C. Closing Conference

The group returned to the conference room and initiated a closing conference at 12:40 p.m.

Mr. Cribbie clarified that a lance in the urea injection system can also be referred to as an injector.

WIN Waste representatives confirmed the generator was installed in 1987 and the manufacture year was not listed in their immediate records.

Mr. Hughes joined the closing conference.

WIN Waste representatives confirmed that the urea tank volume is 6,000 gallons and the solution is 50% urea.

Mr. Cribbie confirmed that there were no odor complaints directly to the company in the last 12 months. Mr. Cribbie said that there were no odor complaints directly to the company since March 2023.

WIN Waste representatives confirmed that maintenance for the generator is contracted to MiltonCat.

Mr. Cribbie said that a stack test protocol was submitted to NH DES for the upcoming stack test planned for 2025.

WIN Waste representatives confirmed no Confidential Business Information was included in the inspection.

Ms. Vasconcelos explained the EPA inspection report process including the 70-day delivery requirement. Mr. Cribbie said that the report can be electronically sent to Kevin Wing and he and Mr. Beauregard can be copied.

Ms. Vasconcelos reviewed the requested deliverables from the facility which was the facility operating plan.

Ms. Vasconcelos provided general compliance assistance by recommending the facility representatives read the applicable regulations. Ms. Vasconcelos explained that EPA does not make compliance determinations in the field.

Ms. Vasconcelos thanked WIN Waste and NH DES representatives for their time. Ms. Vasconcelos departed the facility at 1:10 p.m.