

*DEQ Public Meeting– Bladen County
February 18, 2019*

**Chemours - Fayetteville Works
Draft Air Permit Modification to Reduce PFAS Emissions**

Heather Sands, PE
Chemical Engineer
Permitting Section

Chemours Air Quality Permit Application to Install Thermal Oxidizer/Scrubber System

- Project Background
- Permit Requirements
- Compliance Methods: Testing, Monitoring, Recordkeeping, Reporting
- Timeline

Project Background

April 2018

- DAQ Notification
- Chemours commitment to 99% reduction of GenX emissions from baseline

July 2018

- At DAQ request, Chemours submittal of Permit Application to incorporate 99 percent reduction of GenX emissions

November 2018

- Proposed Consent Order signed to formalize the April 27th commitment to reduce air emissions

January 2019

- Permit drafted to incorporate proposed consent order
- Public Comment Period Begins for Draft Air Permit



Draft Permit Requirements

GenX Facility-wide Limit:
23.027 pounds per year

Thermal Oxidizer/
Scrubber System

- * 99.99% Emission Reduction of all PFAS, including GenX Compounds
- * Replacing existing scrubbers

Carbon Absorbers

- * Installed in May 2018
- * Control Vinyl Ethers North indoor fugitive emissions and PPA process

Enhanced Leak
Detection and Repair

- * Designed to detect leaks sooner and at lower concentrations
- * Increased inspection locations
- * Replacement/improvement of components with low-E technology

Compliance Methods

- Initial Performance Tests
- Annual Performance Tests
- Inspection and Monitoring
- Calculation of facility-wide emissions
- Recordkeeping
- Reporting
- Onsite Inspections



Compliance Methods – Thermal Oxidizer/Scrubber System

Initial Emissions Testing

- Confirm system achieves 99.99% emission reduction
- Establish Operating Parameters

Continuous Compliance Monitoring

- Oxidizer: Firebox temperature and volumetric flowrate at the oxidizer inlet
- Scrubber: pH and flowrate of scrubbing liquid

Annual Emissions Testing

- Ensure proper operation of oxidizer and scrubber
- Establish/confirm operating parameters



Compliance Methods – Carbon Adsorbers

Quarterly Emissions Testing

- Required quarterly to determine carbon replacement schedule and operating parameters
- Establish post-control emissions

Continuous Monitoring

- Hours of operation or production rate or other DAQ-approved parameter

Annual Emissions Testing

- Ensures that carbon adsorbers continue to operate in compliance

Enhanced Leak Detection and Repair

Approved Plan will address:

- Pressure Testing – 0.5 psig pressure drop; 30-min intervals
- Enhanced audial, visual, olfactory inspections
- Instrument monitoring
- Identification and tagging of additional LDAR components
- Enhanced area monitoring
- Replacement or improvement program for valves and connectors



Additional Compliance Requirements

- Shutdown and Malfunction Plan
 - Thermal Oxidizer/Scrubber System and Carbon Adsorbers
 - Approval from DAQ required
 - Requires sources routed to control devices to be shut down if the control device malfunctions
 - Establishes how Chemours will maintain the control devices to minimize malfunctions
- Recordkeeping
 - All records necessary to determine compliance with emission limit
 - Testing results
 - Monitoring data
 - Production data and hours of operation
 - Inspections
 - Malfunction events
- Onsite Inspections
- Reports
 - Semiannual basis
 - Ongoing requirement to disclose



Estimated Timeline

- Public Comment Period began January 18th
- Comment period closes on February 22nd.
- After this meeting we will be holding a Public Hearing on the Air Permit
- Hearing Officer's Report due 30 days after the close of today's hearing
- Director's Final Permitting Action (i.e., issue or deny) – expected end of March/beginning of April



Contact Information

Heather Sands

Permit Engineer

heather.sands@ncdenr.gov

919-707-8725

Gary Saunders

Supervisor, Stationary Source
Compliance Branch

gary.saunders@ncdenr.gov

919-707-8413

More Information Available Online:

<https://deq.nc.gov/news/hot-topics/genx-investigation>

