NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: TBD

Region: Washington Regional Office

County: Bertie

NC Facility ID: 0800102 Inspector's Name: Kurt Tidd Date of Last Inspection: 02/29/2024

Compliance Code: 3 / Compliance - inspection
Permit Applicability (this application only)

SIP: 15A NCAC 02D .0524, .02D 0516, 02D .0521, 02D .1806, 02D .1111, 02D .1100, 02Q .0705, 02Q .0711, 02Q .0501(c)(1), 02Q .0317 of

Facility Data

Applicant (Facility's Name): East Carolina Regional Solid Waste Landfill

Facility Address:

East Carolina Regional Solid Waste Landfill

1922 Republican Road Aulander, NC 27805

SIC: 4953 / Refuse Systems

NAICS: 562212 / Solid Waste Landfill

Facility Classification: Before: Title V After: Fee Classification: Before: Title V After:

NSPS: N/A

NESHAP: MACT Subpart AAAA

PSD: N/A

PSD Avoidance: Carbon Monoxide

NC Toxics: N/A 112(r): N/A

02D .0530, 02D .1806

Other: 40 CFR 62 Subpart OOO

Contact Data Application Data Facility Contact Authorized Contact Technical Contact Application Number: 0800102.20A **Date Received:** 12/21/2020 Matt Markofski Shane Walker Matt Markofski **Application Type:** Renewal Environmental Manager Area President Environmental Manager **Application Schedule:** TV-Renewal (919) 308-5835 (980) 430-8511 (919) 308-5835 **Existing Permit Data** 5111 Chin Page Road 2440 Whitehall Park 5111 Chin Page Road **Existing Permit Number:** 08849/T08 Durham, NC 27703 Durham, NC 27703 Drive, Suite 800 Existing Permit Issue Date: 10/27/2016 Charlotte, NC 28273 Existing Permit Expiration Date: 09/30/2021

Total Actual emissions in TONS/YEAR:

| Town Howard Chings and Total Control and C | | | | | | | | |
|--|------|-------|-------|--------|------|-----------|--|--|
| CY | SO2 | NOX | VOC | СО | PM10 | Total HAP | Largest HAP | |
| 2022 | 6.27 | 32.94 | 15.16 | 120.47 | 6.38 | 6.55 | 2.13 [Hydrogen chloride (hydrochlori] | |
| 2021 | 6.52 | 34.14 | 12.19 | 125.87 | 6.66 | 5.72 | 2.23 [Hydrogen chloride (hydrochlori] | |
| 2020 | 6.19 | 32.69 | 13.04 | 119.37 | 6.31 | 5.96 | 2.11 [Hydrogen chloride (hydrochlori] | |
| 2019 | 6.27 | 32.90 | 11.45 | 120.27 | 6.36 | 6.33 | 2.96 [Hydrogen chloride (hydrochlori] | |
| 2018 | 3.21 | 33.71 | 13.92 | 123.92 | 6.64 | 7.23 | 3.05 [Hydrogen chloride (hydrochlori] | |

Review Engineer: Massoud M. Eslambolchi Comments / Recommendations:

Review Engineer's Signature: Date: Issue 08849/T09
Permit Issue Date:

Permit Issue Date: TBD
Permit Expiration Date: TBD

1. Purpose of Application

East Carolina Regional Solid Waste Landfill has submitted a permit renewal application that was received on December 21, 2020, at the Washington Regional Office (WRO) and on January 14, 2021 by the Raleigh Central Office (RCO). The facility continues operation in compliance with their current TV Permit 08849. This Renewal proposes no modification to the existing equipment and no emission increases. Also, because the North Carolina Rules (15A NCAC 02D .1700), implementing emissions guidelines in Subpart Cf (40 CFR 60) for existing landfills have not yet been approved in the State Implementation Plan (SIP) by the US EPA, the Federal requirements implementing 40 CFR 62 Subpart OOO will be placed into the permit to replace the previous 40 CFR 60, Subpart WWW regulations.

In the February 14, 2022, Federal Register, the U.S. Environmental Protection Agency (EPA) finalized technical revisions and clarifications for the National Standards for Hazard Air Pollutants (NESHAP, Subpart AAAA) for MSW Landfills established in the March 26, 2020, final rule.

- This final rule also amended the MSW Landfill's NSPS regulations in 40 CFR Part 60, Subpart XXX, to clarify and align the timing of compliance for certain requirements involving the installation of a gas collection and control systems (GCCS) under related MSW landfill rules.
- Additionally, the EPA revised the definition of Administrator in the MSW Landfills Federal Plan (40 CFR 62 OOO) that was promulgated on May 21, 2021 to clarify who has the authority to implement and enforce the applicable requirements. The final rule was effective February 14, 2022.

2. Facility Description

East Carolina RSWL is a municipal solid waste landfill owned and operated by Republic Services of North Carolina, LLC. The facility is located at 1922 Republican Road in Aulander, Bertie County, North Carolina. The landfill has been subject to NESHAP Subpart AAAA and operates a gas collection and control system to control NMOC emissions and meet several other requirements. The landfill (ES-01) is the only emission source at the facility. Control devices include two candlestick open flares (CD-Flare1 and CD-Flare2). The facility also maintains a few insignificant sources.

3. Permit History & Application Chronology

| 10/27/2016 | Last TV Renewal issued. |
|------------|---|
| 12/21/2020 | DAQ Received Application (deemed complete). |
| 06/14/2024 | Draft Permit & Review documents submitted for supervisory review. |
| 07/03/2024 | Sent to the facility copy of Draft Permit & Review documents, and PFAS; sent to SSCB and Regional Office for review/comments. No comments received. |
| 07/12/2024 | Received email from facility with completed PFAS questionnaire, and no comment. |
| xx/xx/2024 | EPA and Public comment period begins. |
| xx/xx/2024 | 30-Day Public Notice period ends. |
| xx/xx/2024 | 45-Day EPA comment period ends. |
| xx/xx/2024 | Air Permit 10025T03 Issued. |

4. Table of Changes to Existing Permit No. 08849/T08

| Page No. Section | | Description of Changes | | | |
|---|--------------------------------|--|--|--|--|
| | Cover letter | Updated letterhead and permit using new permit shell Updated permit revision numbers and dates throughout Added page containing "Notice Regarding The Right to Contest A Division Of Air Quality Permit" | | | |
| | Cover letter | | | | |
| | Cover letter | • Revised the "Summary of Changes" to the Permit page | | | |
| 1 | 1 st Page of Permit | Changed number, changed "Replaces Permit" number Changed effective date and issue date of the Permit Revised the application number and complete application date | | | |
| Page 3 | List of Acronyms | Added list to the front of the permit | | | |
| Page 5 | Section 2.1 | Removed NSPS Subpart WWW applicability from table of regulated pollutants Added 40 CFR 62 Subpart OOO to Table permit for existing (unmodified) municipal solid waste landfills | | | |
| Page 6 Section 2.1 A.3 | | Revised MACT AAAA requirements with recent updates to the rule | | | |
| Page 18 Section 2.1 A.4 • Added 40 CFR 62, Subpart OOO requirements for extended (unmodified) municipal solid waste landfills | | Added 40 CFR 62, Subpart OOO requirements for existing (unmodified) municipal solid waste landfills | | | |
| | | Added PFAS Disclosure statement (State-enforceable only) | | | |
| Page 48 | Section 3 | • Added new Section 3 for Insignificant Activities | | | |
| Page 49 Section 4 | | • Added new Section 4 for General Conditions (Updated version 8.0, 7/10/2024) | | | |

5. Changes in Equipment

There are no changes to the facility's permitted emission sources or control devices as part of this Renewal application.

The facility's permitted emission sources are as follows:

| | to identity a permitted emission sources are as tonows. | | | | | |
|------------------------------|---|-----------------------------|--|--|--|--|
| Emission Source ID No. | Emission Source Description | Control Device ID No. | Control Device Description | | | |
| ES-01 MACT AAAA, | Municipal solid waste landfill | CD-GCCS1 | One landfill gas collection and control system | | | |
| 40 CFR 62 Subpart OOO | | CD-Flare1 | One landfill gas-fired open flare (3,000 scfm maximum flow rate) | | | |
| | | CD-Flare2 | One landfill gas-fired open flare (3,000 scfm maximum flow rate) | | | |

The facility's insignificant/exempt activities are as follows:

| Emission Source ID No. | Emission Source Description |
|-------------------------|-----------------------------|
| Emission Source in 110. | |

| IES-04 | Diesel engines for miscellaneous landfill support |
|--------|---|
| IES-05 | Welding operations |
| IES-06 | Diesel storage tank |
| IES-07 | Three (3) leachate storage tanks |

6. Regulatory Review

The facility is currently subject to the following air quality regulations in addition to the General Conditions:

- 15A NCAC 02D .0516: Sulfur Dioxide Emission from Combustion Sources
- 15A NCAC 02D .0521: Control of Visible Emissions
- 15A NCAC 02D .1111: Maximum Achievable Control Technology, 40 CFR 63, Subpart AAAA
- 15A NCAC 02D .0524: New Source Performance Standards "40 CFR 60, Subpart WWW" will be removed from the permit because it no longer applies and will be replaced with the Federal regulation 40 CFR 62, Subpart OOO because the State Plan for Landfills has not been approved by the US EPA 40 CFR 62
- 15A NCAC 02D .1806: Control and Prohibition of Odorous Emissions

All these regulations will remain in the permit except for 40 CFR 60, Subpart WWW.

15A NCAC 02D .0516: Sulfur Dioxide Emission from Combustion Sources

The landfill's existing flares (ID Nos. CD-Flare1 and CD-Flare2) are subject to this requirement. This Renewal Permit does not change the existing requirement. SO₂ emissions from combustion sources are limited to 2.3 pounds per million Btu heat input. The emissions of SO₂ are calculated to be 0.019 which is below the regulatory limit. No monitoring, recordkeeping or reporting is required for LFG combustion in this source. Continued compliance is expected.

15A NCAC 02D .0521: Control of Visible Emissions

The landfill's existing flares (ID Nos. CD-Flare1 and CD-Flare2) are subject to this requirement because they were manufactured after July 1, 1971. Visible emissions are limited to a six-minute average opacity of 20%. Visible emissions from a properly maintained and operated flare are commonly not a concern. No monitoring, recordkeeping or reporting is required for LFG combustion in this source. Continued compliance is expected.

15A NCAC 02D .1111: Maximum Achievable Control Technology, 40 CFR 63, Subpart AAAA

East Carolina MSW landfill (ID No. ES-01) is the subject source because the landfill emits greater than 50 megagrams per year (Mg/yr) NMOC as calculated according to 40 CFR 63.1959. The MACT AAAA regulations contain the updated operational standards, compliance provisions, and monitoring requirements of 40 CFR 63.1958, 63.1960, and 63.1961, as well as the recordkeeping and reporting requirements of MACT AAAA. These conditions also include requirements for enhanced monitoring of elevated temperature wells. The landfill is required to continue wellhead monitoring and surface emissions monitoring, as well as continue to keep records and make periodic reports, some of which are required to be submitted electronically via EPA's electronic reporting tool in CDX.

For reports previously submitted, the Permittee is required to submit a statement with the first semi-annual report certifying that the listed reports were previously submitted to include the dates of submittal. As part of the updated requirements, the landfill will be required to develop a site-specific treatment monitoring plan for a LFG treatment system if it begins the sale of landfill gas for beneficial use.

40 CFR 62 Subpart OOO: Federal Requirements for Municipal Solid Waste Landfills

East Carolina Landfill (ES-01) is classified as an existing MSW landfill because the landfill has accepted waste after November 8, 1987, was constructed before July 17, 2014 and has not been modified after this date. Existing landfills are subject to Emission Guidelines Subpart Cf, as implemented in the North Carolina rule 15A NCAC 02D .1700, upon approval by the US EPA. Since the State Implementation Plan for North Carolina

implementing EG Cf rule for existing landfills (15A NCAC 02D .1700) has not yet been approved, the permit conditions for NSPS WWW written in the existing permit are being removed and replaced with the Federal rules in accordance with 40 CFR 62, Subpart OOO. This landfill is required to continue to operate the GCCS, and to route the collected gas to a control device/system. Compliance is expected.

15A NCAC 02D .1806: Control and Prohibition of Odorous Emissions

This is a "State-enforceable only" requirement and is applicable facility wide. The Permittee shall implement practices or controls sufficient to prevent odorous emissions from causing or contributing to objectionable odors beyond the property boundary. This is a State only requirement. Continued compliance is expected.

NSPS -

- ✓ The MSW landfill (ID No. ES-01) is no longer subject to 40 CFR 60, Subpart WWW "Municipal Solid Waste Landfills" since the facility is now considered an existing source under 40 CFR Subpart Cf "Emission Guidelines and Compliance Times for Municipal Solid Waste Landfills" because the landfill has accepted waste after November 8, 1987 and was constructed prior to July 17, 2014. The NSPS WWW regulations will be removed from the permit and replaced with the Federal Landfill regulations (40 CFR 62, Subpart OOO) for existing facilities since the North Carolina State Plan for existing Landfills has not been approved by the US EPA.
- ✓ The MSW landfill (ID No. ES-01) is NOT subject to 40 CFR 60, Subpart XXX "Municipal Solid Waste Landfills with the Commenced Construction, Reconstruction, or Modification After July 17, 2014" since the landfill has not been modified after July 17, 2014.

NESHAP - The MSW landfill (ID No. ES-01) is subject to 40 CFR 63, Subpart AAAA "Municipal Solid Waste Landfills" since the facility has accepted waste since November 8, 1987, has a design capacity greater than 2.5 million Mg and 2.5 million m³, and has demonstrated an annual NMOC emission rate greater than 50 Mg/yr.

PSD – The facility has previously been approved to avoid PSD for carbon monoxide (CO) emissions from open flares (CD-Flare1 and CD-Flare2). Compliance is expected. The facility's other criteria pollutants emissions do not exceed PSD permitting thresholds.

PSD Avoidance Condition: 15A NCAC 2Q .0317 of 2D .0530:

In order to avoid applicability of 15A NCAC 2D .0530(g) for major sources and modifications, the flares (CD-Flare1 and CD-Flare2) shall discharge into the atmosphere less than 250 tons of Carbon Monoxide per consecutive 12-month period and restrict the annual flow rate of landfill gas into flares (CD-Flare1 and 2) to less than 2,628,000,000 ft³ per year.

Testing [15A NCAC 2Q .0508(f)]

If emission testing is required, the Permittee shall perform such testing in accordance with 15A NCAC 02D .0508(f) and General Condition JJ found in Section 4 of this permit. If the results of this test are above the limit given above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

- 1. The Permittee shall keep monthly records of the amount of landfill gas burned in flares (CD-Flare 1 and CD-Flare 2). The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the landfill gas is not monitored.
- 2. The landfill gas burned in the flares shall be limited such that carbon monoxide emissions shall not exceed 250 tons for any consecutive 12-month period. Calculations shall be made monthly and recorded in a logbook (written or in electronic format), according to the following formula for the burning of landfill gas in the flares:

$$A_{CO} = \left[\frac{0.37 \ lbs \ CO}{1 \times 10^6 \ Btu} \times \frac{B_{CD-Flare1} \ ft^3}{month} \times \frac{506 \ Btu}{ft^3} \times \frac{1 \ ton \ CO}{2000 \ lbs} \right] + \left[\frac{0.37 \ lbs \ CO}{1 \times 10^6 \ Btu} \times \frac{C_{CD-Flare2} \ ft^3}{month} \times \frac{506 \ Btu}{ft^3} \times \frac{1 \ ton \ CO}{2000 \ lbs} \right]$$

Where: A_{co} = total emissions of carbon dioxide (tons/month)

B_{Flare1} = monthly landfill gas flow rate into flare CD-Flare1

C_{Flare2} = monthly landfill gas flow rate into flare CD-Flare2

Landfill gas heat input = 506 Btu/ft^3

AP-42 factor for landfill gas = 0.37 lbs CO/mmBtu heat input

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if records are not kept, and/or if the total carbon monoxide emissions from the flares (CD-Flare1 and CD-Flare2) exceed 250 tons per consecutive 12-month period.

Reporting [15A NCAC 2Q .0508(f)]

The Permittee shall submit a summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month time period between July and December, July 30 of each calendar year for the preceding six-month time period January and June. The report shall contain the following:

- i. The monthly carbon monoxide emissions for the previous 12 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months;
- ii. The monthly landfill gas flow rate quantities for each flare in the previous 17 months.

All instances of deviations from the requirements of this permit must be clearly identified.

Bertie County has triggered increment tracking under PSD for PM-10, SO₂ and NO₂. This permitting action is neither expected to consume nor expand any increments.

112(r) – The facility does not store any of the listed 112(r) chemicals in amounts that exceed the threshold quantities. Therefore, the facility is not required to maintain a written Risk Management Plan (RMP).

CAM – CAM does not apply since the facility is regulated by NSPS and MACT regulations that were promulgated after 1990 and control the pollutants that would be subject to CAM.

Attainment status – Bertie County is in attainment for all criteria pollutants.

7. Air Toxic

This facility performed dispersion modeling in 2012, for seven toxic air pollutants (acrylonitrile, benzene, dichloromethane, hydrogen sulfide, methyl mercaptan, vinyl chloride, and hydrogen chloride).

The DAQ Air Quality Analysis group reviewed the modeling analysis performed by this facility (SCS Engineers as Consultants) and stated that the analysis adequately demonstrates compliance, on a source-by-source basis, for all toxic air pollutants modeled.

The table below is the result of this air toxic modeling for maximum impact from each pollutant:

| Emission Sources | Toxic Air Pollutants | Averaging Period | Emission Limits | % of |
|----------------------------------|----------------------|------------------|------------------|------|
| | | | | AALs |
| ES-01 | Benzene | Annual | 205.4 lbs/year | 3% |
| (Municipal solid waste landfill) | Acrylonitrile | 1-hour | 0.0528 lbs/hour | < 1% |
| | | 24-hour | 1.27 lbs/day | < 1% |
| Flares | Hydrogen Chloride | 1-hour | 1.3784 lbs/hour | < 1% |
| (CD-Flare1 and CD-Flare2) | Vinyl chloride | Annual | 694.3 lbs/year | 3% |
| | Dichloromethane | 1-hour | 0.2099 lbs/hour | < 1% |
| | | Annual | 1,878.3 lbs/year | < 1% |
| | Hydrogen Sulfide | 24-hour | 6.831 lbs/day | < 1% |
| | Methyl Mercaptan | 1-hour | 0.028 lbs/hour | < 1% |

This renewal does not result in any toxic emissions increase. Based on the past modeling results, DAQ has determined that none of the toxic air pollutants evaluated exceed their TPER or AAL, and their impact does not pose an unacceptable risk to human health resulting from this permit renewal approval.

8. Other Regulatory Requirements

- A Zoning Consistency Determination is NOT required for this Renewal application.
- A P.E. Seal is NOT required for this renewal application.
- No permit application fee is required for renewal of an existing TV Permit.

• <u>PFAS:</u>

The NC DEQ has determined that per- and polyfluoroalkyl substances, also known as PFAS, have been and are being deposited in landfills. PFAS has become a significant concern since 2017. PFAS compounds are commonly used in industrial processes and found in waste streams where they can be emitted into the air, deposited into surface water or soil, and eventually reach groundwater. PFAS are also found in many commercial products that eventually find their way to landfills. In response to the growing concern about PFAS, NC DAQ has developed a list of screening questions that are sent to identified industries to help to identify potential air emission sources of emerging contaminants. These questions will be sent to all landfills operating a gas collection and control system and burning LFG onsite in a flare or other combustion device, and to facilities that receive LFG for renewable natural gas facilities.

DAQ requested completion of a screening questionnaire from those landfills with potential PFAS release to the environment. A copy of the facility's responses can be found in the attachment of this review.

"Disclosure of Information Relating to Emissions of Fluorinated Chemicals:

The Permittee shall have an ongoing duty to disclose the known presence of materials containing fluorinated chemicals at the Facility that have the potential to result in the emission of fluorinated chemicals to the environment. Such disclosures shall be in writing and submitted to the Regional Office Supervisor within thirty days of the Permittee becoming aware of such information, unless such information has already been disclosed to DAQ by the Permittee."

When this facility's draft permit for renewal is noticed for public comments, the above permit term on PFAS disclosure will be included in the permit.

• 1-bromopropane

On February 4, 2022, 1-bromopropane was added to EPA's list of hazardous air pollutants (HAPs). This facility does not use or emit 1-bromopropane.

9. Statement of Compliance

The East Carolina Regional Solid Waste Landfill has no record of negative compliance history. The last compliance inspection was conducted by the Washington Regional Office on February 29, 2024. The facility's landfill operations were found to be operating in apparent compliance at that time.

10. Public Notice Review

Public Notice and EPA Review: A notice of the draft Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Consistent with 15A NCAC 02Q .0518(b), the EPA will have a 45-day review period. Based on an agreement between DAQ and EPA, this period will generally coincide with the 30-day public notice period. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a

copy of each permit application, each proposed permit and each final permit shall be provided to EPA. Also, pursuant to 02Q .0522, a notice of the draft Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above. DAQ voluntarily provides notice to each bordering State (Virginia, Tennessee, Georgia, and South Carolina).

Other Regulatory Considerations

Removal of the emergency affirmative defense provisions:

EPA has promulgated a rule (88 FR 47029, July 21, 2023), with an effective date of August 21, 2023, removing the emergency affirmative defense provisions in operating permits programs, codified in both 40 CFR 70.6(g) and 71.6(g). EPA has concluded that these provisions are inconsistent with the EPA's current interpretation of the enforcement structure of the CAA, in light of prior court decisions1. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses2 and will harmonize the EPA's treatment of affirmative defenses across different CAA programs. As a consequence of this EPA action to remove these provisions from 40 CFR 70.6(g), it will be necessary for states and local agencies that have adopted similar affirmative defense provisions in their Part 70 operating permit programs to revise their Part 70 programs (regulations) to remove these provisions. In addition, individual operating permits that contain Title V affirmative defenses based on 40 CFR 70.6(g) or similar state regulations will need to be revised. Regarding NCDAQ, it has not adopted these discretionary affirmative defense provisions in its Title V regulations (15A NCAC 02Q .0500). Instead, DAQ has chosen to include them directly in individual Title V permits as General Condition (GC) J. Per EPA, DAQ is required to promptly remove such impermissible provisions, as stated above, from individual Title V permits, after August 21, 2023, through normal course of permit issuance.

1 NRDC v. EPA, 749 F.3d 1055 (D.C. Cir. 2014).

2 In newly issued and revised New Source Performance Standards (NSPS), emission guidelines for existing sources, and NESHAP regulations, the EPA has either omitted new affirmative defense provisions or removed existing affirmative defense provisions. See, e.g., National Emission Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry and Standards of Performance for Portland Cement Plants; Final Rule, 80 FR 44771 (July 27, 2015); National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters; Final Rule, 80 FR 72789 (November 20, 2015); Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Commercial and Industrial Solid Waste Incineration Units; Final Rule, 81 FR 40956 (June 23, 2016).

11. Comments and Recommendations

This TV Permit Renewal for East Carolina Regional Solid Waste Landfill located in Aulander NC (Bertie County) has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined that this facility is complying or will achieve compliance, as specified in the Permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 08849T09.

Attachment to TV Application – East Carolina Regional Solid Waste Landfill

Facility ID: 0800102

Questionnaire for Landfill facilities with potential PFAS releases

a. In response to the growing concern about PFAS, NC DAQ has developed a list of screening questions for Permittees to help us identify potential air emission sources of emerging contaminants which are listed below.

DAQ Question 1:

Will your facility use any material or products in your operations that contain fluorinated chemicals? If so, please identify such materials or products and the fluorinated chemicals they contain

Not to my knowledge.

DAO Question 2:

Will your facility formulate/create products or byproducts (directly or indirectly) that contain fluorinated chemicals (across multiple media)? If so, please identify such products or byproducts and the fluorinated chemicals they contain.

Yes. Degradation of municipal solid waste generates landfill gas (LFG) and condensate. Additionally, Subtitle D landfills generate a wastewater byproduct referred to as "leachate." Testing at East Carolina has shown evidence of PFAS in leachate. While specific testing of LFG has not bee performed at East Carolina, research that is currently being conducted indicates the likely presence of PFAS in LFG.

DAQ Question 3:

Will your facility generate solid, liquid, or gaseous related emissions, discharges, or wastes/products containing fluorinated chemicals? If so, please identify such waste streams or materials and the fluorinated chemicals they contain.

Yes. As stated above, liquid and LFG created from the landfill will contain PFAS.

DAQ Question 4:

Do your facility's processes or operations use equipment, material, or components that contain fluorinated chemicals (e.g., surface coating, clean room applications, solvents, lubricants, fittings, tubing, processing tools, packaging, facility infrastructure, air pollution control units)? Could these processes or operations directly or indirectly (e.g., through leaching, chemical process, heat treatment, pressurization, etc.) result in the release of fluorinated chemicals into the environment?

Not to my knowledge.

DAQ Question 5:

List the fluorinated chemicals identified (i.e., through testing or desktop review) above in your response under the appropriate methods/approaches? If one is not, are they on any other known US or International target lists? OTM-45 (air emissions) Methods 533 & 537.1 (drinking water) SW-846: Method 8327 (water) Draft Method 1633 (water, solids, tissue) Total PFAS" Draft Method 1621 for Adsorbable Organic Fluorine (wastewater) Non targeted analytical methods Qualitative approach through suspect screening.

See attached analytical data report for leachate sample analyzed by EPA Method 1633.

DAO Ouestion 6:

Are there other facilities or operations in the U.S. or internationally engaged in the same or similar activities involving fluorinated chemicals addressed in your response to the above questions? If so, please provide facility identification information? In addition, are there any ISO (International Organization for Standardization) certification requirements?

Yes. Subtitle D landfills, as a whole, are passive receivers of waste containing PFAS. The unintended consequences of disposing solid waste places a burden on operators of Subtitle D landfills to properly manage the disposal of byproducts containing PFAS.

DAQ Question 7:

Do you plan to store AFFF on site, use it in fire training at the site, use it for fighting fires at the facility, or include it in a fire fighting system at the site?

No.

DAO Question 8:

Are other emerging contaminants (e.g., 1,4-dioxane, brome, perchlorate, 1,2,3-Trichloropropane) used in some capacity within your facility or operations?

No.

DAQ Question 9: Do you need technical assistance to answer the questions above.

No.

- b. The following State-enforceable only condition will be placed in the Title V permit:
- Disclosure of Information Relating to Emissions of Fluorinated Chemicals:
 The Permittee shall have an ongoing duty to disclose the known presence of materials containing fluorinated chemicals at the Facility that have the potential to result in the emission of fluorinated chemicals to the environment. Such disclosures shall be in writing and submitted to the Regional Office Supervisor within thirty days of the Permittee becoming aware of such information unless such information has already been disclosed to DAQ by the Permittee.