NORTH CAROLINA DIVISION OF AIR QUALITY

Application Review

Issue Date: XXXXX xx, 2025

Region: Winston-Salem Regional Office
County: Davidson
NC Facility ID: 2900373
Inspector's Name: Arun Kelly-Rajan
Date of Last Inspection: 09/20/2024
Compliance Code: 3 / Compliance - inspection

Facility Data

Applicant (Facility's Name): Davidson County Municipal Solid Waste Landfill

Facility Address:
Davidson County Municipal Solid Waste Landfill
1160 Old US Highway 29
Thomasville, NC 27360

SIC: 4953 / Refuse Systems
NAICS: 562212 / Solid Waste Landfill

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

Permit Applicability (this application only)

SIP: 15A NCAC 02D .0516, 02D .0521, 02D .0524, 02D .1110, 02D .1111, 02D .1806
NSPS: 40 CFR 60 Subparts XXX, IIII
GACT: 40 CFR Subpart ZZZZ,
NESHAP: 40 CFR 61 Subpart M, Subpart CCCCCC
PSD: N/A
PSD Avoidance: N/A
NC Toxics: N/A
112(r): N/A
Other: N/A

Contact Data

Facility Contact	Authorized Contact	Technical Contact
Steven Sink Operations Manager 1242 Old Highway 29 Thomasville, NC 27360 (336) 240-0666 Steven.Sink@davidsoncountync.gov	Casey Smith Davidson County Manager PO Box 1067 Lexington, NC 27293 (336) 242-2200 Casey.Smith@davidsoncountync.gov	Charlie Brushwood Solid Waste Director 1242 Old Highway 29 Thomasville, NC 27360 (336) 240-0303 Charlie.Brushwood@davidsoncountync.gov

Application Data

Application Number: 2900373.24A
Date Received: 09/23/2024 (in the WSRO)
Application Type: Renewal
Application Schedule: TV-Renewal

Existing Permit Data
Existing Permit Number: 10408T01
Existing Permit Issue Date: 04/23/2020
Existing Permit Expiration Date: 03/31/2025

Total Actual emissions in TONS/YEAR:

CY	SO2	NOX	VOC	CO	PM10	Total HAP	Largest HAP
2023	---	0.1200	6.61	1.63	0.0100	4.00	1.49 [Toluene]
2022	---	0.1000	5.87	0.0200	0.0100	3.55	1.32 [Toluene]
2021	---	0.0300	5.15	0.0100	---	3.12	1.16 [Toluene]
2020	0.0100	0.0800	5.20	0.0200	0.0100	3.14	1.17 [Toluene]
2019	---	0.0400	4.70	0.0100	---	2.79	1.06 [Toluene]

Review Engineer: Booker T. Pullen

Review Engineer's Signature: **Date:** XXXXX xx, 2025

Comments / Recommendations:
Issue: 10408T02
Permit Issue Date: XXXX xx, 2025
Permit Expiration Date: XXXX xx, 2030

1.0 Purpose of Application(s)

The Consulting Engineering Firm of Smith Gardner, Inc. (S+G) has prepared renewal application No. 2900373.24A for the Davidson County Solid Waste Landfill (Facility ID 2900373) including the addition of two insignificant activities. There are no other changes, or confidential or trade secret information requests. The renewal application was received on September 23, 2024 in the Winston Salem Regional Office (FRO) then forwarded to the Raleigh Central Office. This application was received at least six months prior to the expiration date (March 31, 2025) per Condition K of the existing permit (10408T01). Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

The permit modification for this renewal of the Title V operation permit is required to go through both a 30-day public notice and a 45-day EPA review before.

The facility contact for this application is Charlie Brushwood, Solid Waste Director, phone number 336-240-0303). The contact for the consultant at S+G is Matt Lamb, senior Scientist, (phone number 919-828-0577 ext. 121).

2.0 Facility Description

The Davidson County MSW Landfill currently operates under Solid Waste Permit No. 29-06. The entire MSW landfill is comprised of four sites consisting of two unlined sites known collectively as the Holly Grove site, the closed Phase 1 site, and the active Phase 2 site. Phase 1 has 56 well heads, and all of them are active. Phase 2 Area 1 has 22 well heads, and all of them are active. Phase 2A and 2B are both full. Phase 2, Area 3A and 3B are currently accepting waste. A voluntary landfill gas collection and control system (GCCS) has been installed by Davidson Gas Producers, LLC (as below) and not Davidson County Solid Waste Landfill (landfill owner/operator), covering all four areas of the landfill, for collection and subsequent beneficial use of the gas for energy production. The collected gas is sent to a third-party landfill gas-to-energy (LFGTE) facility, Davidson Gas Producers, LLC (Facility ID 2900359, Permit No. 10059R06) which owns and operates a landfill gas-fired engine rated at 2,233 HP with an LFG flow rate of 540 SCFM, and a flare with a rated flow rate of 900 SCFM. The LFGTE site is located nearby on land leased from Davidson County, and the landfill does not exercise any control over the engine nor the flare. The Landfill also operates a diesel-fired leachate pump (ID No. ES-2), which operates as needed after rain events to transfer leachate from a leachate pond to trucks for treatment.

The facility is subject to Title V because it is a landfill that has a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters.

3.0 History/Background/Application Chronology

History/Background

April 23, 2020	The last Title V permit renewal was issued.
June 17, 2024	Tier 2 test report was received by the Winston Salem Regional Office for the 2024 calendar year and the report was scanned into Laserfiche on this same date.

Application Chronology

September 23, 2024	Application No. 2900373.24A (TV renewal) was received by the Winston Salem Regional Office, then forwarded to the Raleigh Central Office.
September 23, 2024	Application No. 2900373.24A was scanned by the Winston Salem Regional Office and placed into Laserfiche.

October 2, 2024 DAQ Central Office sent an acknowledgment letter indicating that application No. 2900373.24A was complete on September 23, 2024.

December 30, 2024 Draft permit and review forwarded to Supervisor for comments. Comments were received from Supervisor on January 14, 2025 with comments which were incorporated into the draft permit and engineering review.

January 23, 2025 Draft permit and review forwarded to Stationary Source Compliance (SSCB). A response was received on February 3, 2025, stating that SSCB (Samir Parekh) had no comments.

January 23, 2025 Draft permit and review sent to the Winston Salem Regional Office. A response was received on January 30, 2025, stating that the Region (Robert Barker) had no comments.

January 23, 2025 Draft permit was sent to the applicant. Comments were received from the applicant's consultant (Smith Gardner, Mac Jones) on Wednesday February 5, 2025, via email. All pertinent comments were included in the draft permit.

January xx, 2025 Draft permit and permit review forwarded to public notice via DAQ website.

XXXXXX, 2025 Public comment period ends. Comments were/were not received. See Section 11.0 of this document for a summary of the comments.

XXXXXX, 2025 EPA comment period ends. Comments were/were not received. See Section 11.0 of this document for a summary of the comments.

XXXXXX, 2025 Permit issued.

4.0 Permit Modifications/Changes and TVEE Discussion

The following table describes the modifications to the current permit (10408T01) as part of the renewal process to reissue as 10408T02. This summary is not meant to be an exact accounting of each change but a summary of those changes.

Page(s) of new Permit	Section in T02	Description of Changes
Page 1	Cover Letter	• Updated letterhead and permit using new permit shell. • Updated permit revision numbers and dates throughout.
Page 2	Cover Letter	• Changed engineer's name and contact information to Booker T. Pullen
Page 3	Cover Letter	• Added page containing "Notice Regarding The Right to Contest A Division Of Air Quality Permit". Changed the name of the General Counsel to Daniel S. Hirschman.
Page 4	Cover Letter	• Revised the Summary of Changes to the Permit page.
Page 1 of Permit	Permit	• Changed Permit number, changed "Replaces Permit" number, changed effective date of Permit, revised the application number and the complete application date.
Page 2	Permit	• Revised the "Table of Contents" to reflect the most current shell language/format.
Page 3	Permit	• Added the List of Acronyms.
Page 11	Permit, Section 2.1.B.3	• Replaced "annually" with "within 1 year + 30 days of the previous change".
Page 12	Permit, Section 2.2	• Changed Section 2.2 to Multiple Emissions Section.

Page 12	Permit, Section 2.3	• Changed Section 2.4 to 2.3 "Permit Shield for Non-applicable Requirements" • Added to the Multiple Emissions Section the Disclosure of Information Relating to Emissions of Fluorinated Chemicals [15A NCAC 02Q. 0308(a); 15A NCAC 02Q. 0309(b)] because landfills are an industry sector that has been found to possibly have PFAS in the waste that is deposited in the landfill.
Page 13	Permit, Section 3.0	• Added Section 3.0 "Insignificant Activities".
Pages 14 - 22	Permit, Section 4.0	• Added the most current version of General Conditions (version 8.0, 7/10/2024).
Page 16	Permit Section 4.0	• Removed Condition K from General Conditions (version 8.0, 7/10/2024).

This permit renewal for application 2900373.24A is being processed without modifications, but with minor changes to the Title V Equipment Editor (TVEE) including an update to the insignificant activities list. No other modifications have been made to the permit since the last renewal.

5.0 Existing Permitted Sources and Associated Pollution Controls and Appurtenances

The following table contains a summary of all permitted emission sources and associated air pollution control devices and appurtenances:

Emission Source ID No.	**Emission Source Description**	**Control Device ID No.**	**Control Device Description**
ES-1 **NSPS XXX** **40 CFR 61 Subpart M**	Municipal Solid Waste Landfill	CD-GCCS-1* CD-1*	Landfill gas collection System Landfill gas-fired utility flare (900 standard cubic feet per minute maximum flow rate)
ES-2 **GACT ZZZZ**	Diesel fuel-fired leachate pump (80 horsepower)	N/A	N/A

* This landfill gas collection and control system (CD-GCCS-1 and CD-1) was installed voluntarily and is owned and operated by the Davidson Gas Producers, LLC (Facility ID No. 29000359) facility. The NSPS Subpart XXX regulations and requirements associated with the collection and control system do not apply to this facility at this time.

The facility's insignificant/exempt activities exempt in accordance with 15A NCAC 02Q .0503(8) are as follows:

Emission Source ID No.	Emission Source Description
IES-2 **GACT ZZZZ**	Diesel fuel-fired emergency generator (25 kW)
IES-3	Waste oil heater (<0.5 million Btu per hour heat input)
IES-4	Waste oil heater (<0.5 million Btu per hour heat input)
IES-5	Leachate Storage tank (330,000 gallon capacity)
IES-6	Diesel fuel storage tank (1,000 gallon capacity)
IES-7	Diesel fuel storage tank (10,000 gallon capacity)
IES-8	Diesel fuel storage tank (10,000 gallon capacity)
IES-9	Gasoline storage tank (2,000 gallon capacity)
IES-10 **GACT ZZZZ** **NSPS IIII**	Diesel fuel-fired emergency generator (135 kW)
IES-11 **GACT ZZZZ** **NSPS IIII**	Diesel fuel-fired emergency generator (30 kW)

The TV Equipment Editor (TVEE) was updated with this application. TVEE was reviewed and approved by Connie Horne of DAQ on January 29, 2025.

6.0 Regulatory Review

This facility is subject to the following regulations. The facility's equipment and operations have not changed since the last renewal in 2020 except for some insignificant activities. The permit was updated to reflect the most current stipulations for all applicable regulations, where necessary.

15A NCAC 02Q .0503(8) "Definitions (Insignificant Activities)
15A NCAC 02D .0516 "Sulfur Dioxide Emissions From Combustion Sources"
15A NCAC 02D .0521 "Control of Visible Emissions"
15A NCAC 02D .0524 "New Source Performance Standards (40 CFR Part 60, Subpart XXX, and Subpart IIII)"

15A NCAC 02D .1110 "National Emission Standards For Hazardous Air Pollutants (40 CFR 61, Subpart M)"
15A NCAC 02D .1111 "Maximum Achievable Control Technology (40 CFR 63, Subpart ZZZZ, and Subpart CCCCCC)"
15A NCAC 02D .1806 "Odorous Emissions"
15A NCAC 02D .2100 "Risk Management Program"

The regulatory requirements under each rule that applies to this facility are discussed below in Section 7.0. In addition, some rules that do not apply to this facility are also discussed below in Section 7.0.

a. 15A NCAC 02Q .0503(8) "Insignificant activities because of size or production rate"
The following activities are considered insignificant activities because of emission rate. These sources each have potential emissions of particulate, sulfur dioxide, nitrogen oxides, volatile organic compounds, and carbon monoxide before air pollution control devices, are each no more than five tons per year and whose potential emissions of hazardous air pollutants before air pollution control devices, are each below 1000 pounds per year.
   - Diesel-fired emergency generators: IES-2 (25 kW), IES-10 (new, 135 kW), IES-11 (new, 30 kW)
   - Waste oil heaters (< 0.5 million Btu per hour heat input each): IES-3, IES-4
   - Leachate storage tank: (330,000 gallon capacity)
   - Diesel fuel storage tanks: IES-6 (1, 000 gallon capacity), IES-7 (10,000 gallon capacity), IES-8 (10,000 gallon storage tank)
   - Gasoline storage tank: IES-9 (2,000 gallon capacity)

   It is noted that two diesel-fired generators (IES-10 and IES-11), as above, are being added to the Title V permit through this renewal.

b. 15A NCAC 02Q .0512 "Permit Shield and Application Shield"
Paragraph 02Q .0512(a)(1)(B) allows Title V permits to specifically identify rules that are not applicable to the facility (referred to as a "permit shield"). The existing permit includes a permit shield for 15A NCAC 02D .1111 (40 CFR 63, Subpart AAAA "National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills). See Section 2.3 of the draft Title V permit.

c. 15A NCAC 02D .0516 "Sulfur Dioxide Emissions From Combustion Sources"
The facility's combustion sources {ES-2 (80 kW), IES-2 (25 kW), IES-10 (135 kW), IES-11 (30 kW)} are the subject sources. All the engines located at this facility are diesel-fired. SO_2 emissions from these sources shall not exceed 2.3 pounds per million heat input. The AP-42 Chapter 3.3-1 emission factor for SO_2 is $2.05E^{-3}$ lbs SO_2/hp-hour. Compliance is expected.

Example Calculation:

135 kW = 181 hp (7675.71 Btu/minute)
Emission factor = 2.05E-3 lbs SO_2/hp-hour

$$Potential\ SO_2\ emissions = \frac{2.05\ x\ 10^{-3}\ lbs\ SO_2}{hp - hour} \times \frac{181\ hp}{1} = \frac{0.371\ lbs\ SO_2}{hour}$$

$$Allowable\ SO_2\ emissions = \frac{2.3\ lbs\ SO_2}{10^6\ Btu} \times \frac{7675.71\ Btu}{minute} \times \frac{60\ minutes}{hour} = \frac{1.06\ lbs\ SO_2}{hour}$$

The potential emission rate is below the allowable emission rate. Compliance is expected.

d. 15A NCAC 02D .0521 "Control of Visible Emissions"
The combustion sources are subject this regulation and the visible emissions ("VE") for sources constructed after 1971 is 20% over any six-minute period, with the following exceptions: (1) No six-minute period exceeds 87 percent opacity; (2) No more than one six-minute period exceeds 20 percent opacity in any hour; and (3) No more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

In general, no VE is expected from properly operated combustion sources that fire low sulfur diesel fuel. Thus, there is no justification or need for monitoring for VE for the combustion sources.

e. 15A NCAC 02D .0524 "New Source Performance Standards (40 CFR 60, Subpart IIII)"
The existing diesel fuel-fired engines IES-1 (this engine will be removed in Permit 10408T02), IES-2 and ES-2 are not subject to 40 CFR 60, Subpart IIII "Stationary Compression Ignition Internal Combustion Engines" because the construction dates are prior to the applicability date of the NSPS regulation. However, the new engines (insignificant activities) IES-10 and IES-11 will be subject 40 CFR 60, Subpart IIII. Please see the discussion in Section 7.0 below.

f. 15A NCAC 02D .0524 "New Source Performance Standards (40 CFR 60, Subpart XXX)"
The MSW Landfill (ID No. ES-1) is subject to 40 CFR 60, Subpart XXX "Municipal Solid Waste Landfills that Commenced Construction, Reconstruction or Modification After July 17, 2014," due to the most recent construction of the Phase 3, Area 3 lateral expansion. Please see the discussion in Section 7.0 below.

g. 15A NCAC 02D .1110 "National Emission Standards For Hazardous Air Pollutants (40 CFR 61, Subpart M)"
The MSW Landfill (ID No. ES-1) is subject to 40 CFR 61, Subpart M "National Emission Standard for Asbestos," since it is an active asbestos-containing waste disposal site. Please see the discussion in Section 7.0 below.

h. 15A NCAC 02D .1111 "Maximum Achievable Control Technology (40 CFR 63, Subparts ZZZZ and CCCCCC)"
The gasoline storage tank (ID No. IES-9) is subject to 40 CFR 63, Subpart CCCCCC "Gasoline Dispensing Facilities" since the facility is an area source of HAPs, and the facility meets the definition of a gasoline dispensing facility as any stationary facility which dispenses gasoline into the tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. Gasoline storage tanks are listed as affected sources under §63.11111(a), and there are no size distinctions. Please see the discussion in Section 7.0 below.

i. 15A NCAC 02D .1806 "Control and Prohibition of Odorous Emissions"
The Permittee shall prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary. During the latest inspection of the facility on September 20, 2024, no objectionable odors were detected past the facility's boundary and there were no records of complaints in the IBEAM database. Compliance is indicated. This is a state-only requirement.

j. 15A NCAC 02D .2100 "Risk Management Program (Section 112(r) of the Clean Air Act)"
This facility does not store any material listed in 40 CFR 68.130 above its respective threshold. Therefore, this rule does not apply to this facility.

7.0 NSPS, MACT, PSD, CAM

a. NSPS: 40 CFR 60, Subpart IIII "New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines"

This regulation applies to owners or operators of compression ignition (CI) reciprocating internal combustion engines (RICE) that commence construction after July 11, 2005, and that are manufactured after April 1, 2006 excluding fire pump engines, and the fire pump engines manufactured after July 1, 2006.

- The diesel-fired emergency generators and leachate pump (ID Nos. IES-1, IES-2, and ES-2) are NOT subject to 40 CFR 60, Subpart IIII "Stationary Compression Ignition Internal Combustion Engines" because the construction dates are prior to the applicability date of the NSPS regulation.
- The newly added diesel-fired emergency generators (ID Nos. IES-10 and IES-11) are subject to 40 CFR 60, Subpart IIII.

  - IES-10 is a diesel fuel-fired emergency generator (135 kW) RICE installed at the facility in March 2021 per inspection report dated signed on October 7, 2024.
  - IES-11 is a diesel fuel-fired emergency generator (30 kW) RICE installed at the facility in March 2021 per inspection report dated signed on October 7, 2024.

The following table shows potential emissions of each diesel fuel-fired emergency generator:

Pollutant	IES-10 (135 kW heat input, 181 hp)	IES-11 (30 kW heat input, 40.23 hp)
PM_{10}	0.10 tpy*	0.02 tpy*
$PM_{2.5}$	0.10 tpy*	0.02 tpy*
SO_2	0.05 tpy*	0.01 tpy*
NOx	1.40 tpy*	0.31 tpy*
CO	0.30 tpy*	0.07 tpy*
VOC	0.11 tpy*	0.03 tpy*

*The emissions calculations were based on 500 hours/yr of operation using the DAQ Emissions Calculation Spread sheet for "Diesel fired Internal Combustion Engines Emissions"

As shown in the table above, the emissions of each pollutant from each generator are less than 5 tpy. Therefore, because of the size of the engines, they can be considered as insignificant sources per 15A NCAC 02Q .0503, however these engines will still be subject NSPS IIII.

Compliance for these engines is as follows:

The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Environmental Management Commission Standard 15A NCAC 02D .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart IIII, including Subpart A "General Provisions."

General Provisions
Pursuant to 40 CFR 60 .4218, the Permittee shall comply with the General Provisions of 40 CFR Part 60 Subpart A as presented in Table 8 of 40 CFR Part 60 Subpart IIII.

Emission Standards
The Permittee shall comply with the emission standards for new non-road CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for these sources. [40 CFR 60.4205(b)]

Fuel Requirements
Beginning October 1, 2010, the Permittee shall use diesel fuel in the engines that meets the requirements as specified in 40 CFR 80.510(b) (i.e., 15 ppm sulfur diesel), except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]

Monitoring
The engines shall be equipped with a non-resettable hour meter prior to startup. [40 CFR 60.4209(a)]
The engines, which are equipped with a diesel particulate filter, must be installed with backpressure monitors that notifies the owner or operator when the high backpressure limit of the engine is approached. [40CFR 60.4209(b)]

Compliance Requirements
The Permittee shall, operate and maintain the engines and control devices according to the manufacturer's emission related-written instructions over the entire life of the engine. [40 CFR 60.4206 and 60.4211(a)]

The Permittee shall comply with the emission standards of this Subpart by purchasing an engine certified to the emission standards. The engine shall be installed and configured according to the manufacturer's emission-related specifications. [40CFR 60.4211(c)]

b. NSPS: 40 CFR 60, Subpart XXX "Standards of Performance for Municipal Solid Waste Landfills That Commenced Construction, Reconstruction, or Modification After July 17, 2014"

This source is subject to 40 CFR 60, Subpart XXX "Standards of Performance for Municipal Solid Waste Landfills that Commenced Construction, Reconstruction, or Modification After July 17, 2014," because the landfill was modified after July 17, 2014. The design capacity of the landfill was increased to a Title V level (greater than 2.5 million Mg by weight, and 2.5 million cubic meters by volume) in July 2014 with the receipt of the Solid Waste Operation permit for Phase 2. The facility is required to calculate an NMOC emission rate for the landfill annually. If the calculated NMOC emission rate is less than 34 megagrams per year, the landfill shall submit an emission report annually. If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, then the landfill shall either install equipment to reduce emissions or determine a site specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 sampling procedures provided in §60.754(a)(3). Upon exceeding the 34 Mg/yr threshold for NMOC emissions, the landfill shall trigger the requirements to submit a GCCS design plan for approval, and subsequently install and operate the GCCS. The facility does have a voluntary GCCS installed by Davidson Gas Producers, which collects gas that is routed to a separate Landfill Gas-To-Energy facility, Davidson Gas Producers, LLC (Facility ID 2900359). Davidson Gas Producers owns and operates a GCCS, an open flare, and an LFG-fired generator under air quality Permit No. 10059.

Based on the calculated NMOC emissions under Tier 1 of the NSPS XXX, the emission rate from the Davidson County Municipal Solid Waste Landfill exceeded the 34 megagram per year threshold. Therefore, the landfill conducted Tier 2 sampling to determine the site specific NMOC concentration for calculation of the annual Tier 2 NMOC emission rates. This Tier 2 calculation has been performed several times, and the most recent test was conducted on April 24, 2024, and the results were submitted on June 17, 2024, to the DAQ. The 5-year NMOC emissions projection was as follows in Table 1 below.

Based on the results in Table 1, NMOC emissions are not projected to exceed 34 Mg per year during the next five years and the facility is below the regulatory threshold requiring the installation of a gas collection and control system. In accordance with 40 CFR 60.767(b)(1)(ii), the Davidson County Landfill requested that they be allowed to submit an estimated NMOC rate in accordance with the results listed in Table 1 below in lieu of an annual report for the next five years. The DAQ agrees in accordance with the NSPS regulation and retesting will be required again in 2029.

Table 1: Current and projected NMOC Emissions

Reporting Year	NMOC Emissions (Mg/yr)
2024	25.1
2025	25.9
2026	26.7
2027	27.4
2028	28.2

The facility shall keep for at least five years, up-to-date, readily accessible, on-site records of the design capacity report which triggered the standard for landfills greater than 2.5 million megagrams and 2.5 million cubic meters, the current amount of solid waste in place, and the year-by-year waste acceptance rate. The lasted signed inspection report dated October 7, 2024 stated that the Davidson County Landfill appeared to be in compliance with all regulatory requirements.

NOTE:
Since the Davidson County Landfill does not own or operate the existing voluntary gas collection and control system, in the future when the landfill's NMOC emissions equal or exceed 34 Mg NMOC, the DAQ will look at both the Davidson County Landfill and the Davidson Gas Producers, LLC facility as one single stationary source because all three prongs of this type of source determination would be met.

EPA three-prong test:
To determine if multiple activities are considered a single source, the EPA uses a three-part test:

- Industrial grouping: The activities must belong to the same industrial category.
- Location: The activities must be on contiguous or adjacent properties.
- Control: The activities must be under common control (usually concerning legal ownership).
- Common control interpretation:
  "Common control" goes beyond just legal ownership and can include situations where one entity has significant influence over another, even without direct ownership.

In the case of the Davidson County Landfill, once the NMOC threshold is crossed (34 Mg NMOC per year emissions), in order to show compliance with NSPS Subpart XXX, the landfill will need a properly operated gas collection and control system (design plan, monitoring, reporting, and recordkeeping gas collection system) to meet the requirements.

In the event that this single source determination was performed, the two entities could still hold separate permits, however, both permits would have to be Title V permits (even the Davidson Gas Producers Air Permit).

Example: A manufacturing plant and a waste disposal facility owned by different companies but located on adjacent properties and with operations heavily intertwined, could be considered a single source if the EPA determines there is "common control" due to a contractual agreement or significant business relationship between the companies, or operational management over another.

c. MACT: 40 CFR 63, Subpart CCCCCC "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities"

The gasoline storage tank (ID No. IES-9) is subject to 40 CFR 63, Subpart CCCCCC "Gasoline Dispensing Facilities" since the facility is an area source of HAPs, and the facility meets the definition of a gasoline dispensing facility as any stationary facility which dispenses gasoline into the tank of a motor vehicle, motor vehicle engine, nonroad vehicle, or nonroad engine, including a nonroad vehicle or nonroad engine used solely for competition. Gasoline storage tanks are listed as affected sources under §63.11111(a), and there are no size distinctions.

Since IES-9 is an insignificant activity, there is no permit condition, however the facility is still required to comply with Subpart CCCCCC. The facility has the general duty to minimize emissions by operating and maintaining affected sources, and their associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution practices for minimizing emissions. In addition, since the facility's throughput is expected to be less than 10,000 gallons per month, based on recent purchase information provided by the facility's consultant, the facility is subject to the requirements of §63.11116.

This section states that the facility must handle the gasoline in a manner which will not result in vapor release to the atmosphere for an extended period of time. Measures to be taken include, but are not limited to:

- Minimize gasoline spills;
- Clean up spills as expeditiously as practicable;
- Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
- Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices.

There are no notification or reporting requirements for facilities with a throughput of less than 10,000 gallons per month, however, the facility shall supply records of gasoline throughput within 24 hours of a request by DAQ. Additionally, should the facility's monthly gasoline throughput exceed 10,000 gallons, the facility will be subject to the requirements of §63.11117 for facilities with a monthly throughput of 10,000 gallons of gasoline or more, or §63.11118 for facilities with a monthly throughput of 100,000 gallons of gasoline or more, whichever is applicable, and must meet the applicable notification, testing, monitoring, recordkeeping, and reporting requirements. If an affected source's throughput ever exceeds an applicable throughput threshold, the affected source will remain subject to the requirements for sources above the threshold, even if the affected source throughput later falls below the applicable source threshold.
[§63.11111(i)]

d. MACT: 40 CFR 63, Subpart ZZZZ "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines"

This facility is a minor source of HAPs because it does not have the potential to emit more than 10 tons of any individual HAP or 25 tons of total combined HAPs. Also, this facility is not expected to have emissions of 1-bromopropane.

The Permittee shall comply with all applicable provisions, including the monitoring, recordkeeping, and reporting contained in Environmental Management Commission Standard 15A NCAC 02D .1111 "Maximum Achievable Control Technology" (MACT) as promulgated in 40 CFR 63, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines."

The permitted sources subject to this regulation are the leachate pump (ES-2, 80 hp, existing), diesel fuel-fired emergency generator (IES-10, 135 kW, new), and a diesel fuel-fired emergency generator (IES-11, 30 kW, new).

- The diesel fuel-fired leachate pump (ES-2) was manufactured in 2002, is classified as an existing non-emergency stationary RICE located at an area source of HAP emissions. For stationary RICE located at an area source of HAP emissions, it is considered "existing" if it commenced construction or reconstruction before June 12, 2006.

  The leachate pump (ID No. ES-2) was previously considered portable but was used in place for more than 12 months, therefore it was considered a stationary source and placed on the permit as such. For compliance, the facility shall meet the requirements of Table 2d of 40 CFR 63 Subpart ZZZZ. In addition to maintaining and operating the engine according to the manufacturer's written instructions. The facility may also opt to use an oil analysis program to extend the oil change requirement of Table 2d. There are no operating limitations, no fuel requirements, no test requirements, and no notification requirements for this source.

  The facility must operate the engine in a manner consistent with safety and good air pollution control practices for minimizing emissions, keep sufficient records to demonstrate compliance with manufacturer's written instructions and the maintenance requirements of Table 2d, and submit periodic reports. During the latest compliance inspection, signed on October 7, 2024, the facility appeared to be complying with the maintenance practice requirements. Continued compliance is expected.

- The diesel fuel-fired emergency generator (IES-10, 135 kW), and a diesel fuel-fired emergency generator (IES-11, 30 kW) are considered new "insignificant" stationary RICE located at an area source of HAP emissions.

  The heat input rating and the installation dates of the emergency generators are listed as follows:

  - IES-10: 135 kW emergency RICE installed at the facility in March 2021 per inspection report dated signed on October 7, 2024.
  - IES-10: 30 kW emergency RICE installed at the facility in March 2021 per inspection report dated signed on October 7, 2024.

On June 26, 2023 (88 FR 41361), the EPA proposed changes to Sections 111 and 112 (40 CFR Part 60, Subpart IIII, 40 CFR Part 60, Subpart JJJJ, and 40 CFR Part 63, Subpart ZZZZ).

The following changes were made to regulations for Non-Emergency, non-black start CI stationary RICE ≤300 HP in Table 2d of 40 CFR 63, Subpart ZZZZ:

a. Change oil and filter every 1,000 hours of operation or within 1 year plus 30 days of the previous change, whichever comes first. <u>This requirement has been updated from "annually", which implies once per calendar year, to "within 1 year plus 30 days", which specifies a more stringent period.</u>

b. Inspect air cleaner every 1,000 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary. <u>This requirement has been updated from "annually", which implies once per calendar year, to "within 1 year plus 30 days", which specifies a more stringent period.</u>

c. Inspect all hoses and belts every 500 hours of operation or within 1 year plus 30 days of the previous inspection, whichever comes first, and replace as necessary. <u>This requirement has been updated from "annually", which implies once per calendar year, to "within 1 year plus 30 days", which specifies a more stringent period.</u>

During periods of startup, the Permittee shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

Because of the size of the emergency engines, they can be considered as insignificant sources per 15A NCAC 02Q .0503, however, these engines will still be subject MACT Subpart ZZZZ. In accordance with 40 CFR 63. 6590(c)(1), compliance for these engines, which are located at an area source of HAPs shall follow the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII for compression ignition engines.

e. NESHAP: 40 CFR 61, Subpart M "National Emissions Standards for Hazardous Air Pollutants (Asbestos)"
The facility is an active disposal site for asbestos-containing wastes; therefore, it is subject to the requirements of this regulation. To comply, the facility must adhere to a general set of work practices which may include ensuring there are no visible emissions at the disposal site, covering waste daily with at least six inches of compacted non-asbestos material or use another dust suppression agent, or the landfill may propose alternative methods for DAQ approval.

The facility will be required to post signage and barriers if the method of compliance does not include covering the asbestos-containing waste. Closed portions of the landfill which have previously received asbestos-containing waste are also subject and are required to comply with the requirements of 40 CFR 61.151 for inactive waste disposal sites.

The facility's current Solid Waste permit contains a requirement for the facility to comply with the requirements of 40 CFR 61, Subpart M, and continued compliance is expected.

f. PSD: 15A NCAC 02D .0530 "Prevention of Significant Deterioration"
This regulation does not apply to this renewal application with the addition of two insignificant emergency generators, because there will be no significant emissions increases.

Davidson County has triggered increment tracking under PSD for PM_{10}, $PM_{2.5}$ and NO_x. This renewal/modification (insignificant activities) will result in an increase in 0.49 pounds per hour of PM_{10}, 0.49 pounds per hour of pollutant $PM_{2.5}$, and 6.86 pounds per hour of NOx.

g. CAM: 15A NCAC 02D .0614 "Compliance Assurance Monitoring"
The landfill (the source) includes control devices (GCCS and flare) that are designed to reduce emissions of NMOCs to comply with the NSPS requirements. No other requirements apply to the landfill for NMOCs and no other control devices are installed. But CAM does not apply since the landfill is subject to a post-1990 NSPS. Also, the combustion sources such as engines are subject to post-1990 NESHAPS. Thus, none of the sources at the facility are subject to CAM.

8.0 Facility Wide Air Toxics

The facility never triggered a dispersion modeling demonstration for toxic air pollutants in the past, although permit revision T00 does contain a 02Q .0711 condition. The facility's emission sources are subject to NESHAP (Subpart 61) regulations, and the facility requested that all toxic conditions be removed from the permit since the emission sources are exempt from permitting for toxics under the conditions of 15A NCAC 02Q .0702(a)(27).

Prior to submitting that request, the landfill requested that DAQ perform dispersion modeling for acrylonitrile, benzene, and vinyl chloride since those pollutants exceeded their respective TPERs, based on calculations using the AP-42 Chapter 2.4 (November 1998) concentrations and methods. The LFG generation rate was estimated to peak in CY2045, the anticipated end of life of the landfill, using LandGEM. The result of the LandGEM model was a total LFG generation rate of 20,842,40 m^3 per year for all three landfill areas.

When making the initial calculations the landfill assumed the default collection efficiency of 75% for the GCCS. However, emissions reported on the landfill's CY2017 AQEI exceeded the emission rates which were requested to be modeled since the collection rate of the gas being sent to the LFGTE site was approximately 57% and the rest of the generated landfill gas is assumed to have been emitted to the atmosphere.

Because of this, the landfill reported that actual emissions of hydrogen sulfide also exceed the TPER in addition to acrylonitrile, benzene, and vinyl chloride in 2017. Furthermore, the emission rates reported in the AQEI were higher than the rates included in the application which were calculated at the end of life of the landfill. To account for the scenario of the LFGTE facility collecting and combusting less than 75% of the gas generated by the landfill, the emission rates were recalculated assuming the more conservative 57% LFG collection rate through the end of life of the landfill.

After the initial modeling was completed, a non-emergency diesel-fired leachate pump (ID No. ES-2) was discovered during a compliance inspection. The model was updated to include the benzene emissions from the engine driving the leachate pump.

The following example calculation is for the emission of benzene from the landfill's surface. [AP-42 Section 2.4.4 – Emissions]

- Total LFG generation rate (LandGEM) = 20,842,401 m^3/year
- Methane is only 50% of this gas stream (10,421,200.5 m^3/year)
- $Q_{Benzene}$ = Emission rate of benzene, m^3/year
- $C_{Benzene}$ = Concentration of benzene (1.91 ppmv, AP-42 default value)
- Multiplication factor for 50% methane concentration in landfill gas = 2.0
- Molecular weight of benzene = 78.11 g/gmole

$$Q_{Benzene} = 2.0 \times Q_{CH_4} \times \left(\frac{C_{Benzene}}{1\times10^6}\right) \text{ (AP-42, Equation 3)}$$

$$Q_{Benzene} = 2.0 \times 10{,}421{,}200.5 \frac{m^3}{year} \times \left(\frac{1.91 \text{ parts}}{1\times10^6}\right) = 39.81 \frac{m^3}{year}$$

The mass of benzene present in the methane was found using Equation 4 of AP-42, Section 2.4.4.

$$UM_{Benzene} = 39.81 \frac{m^3}{year} \times \left[\frac{78.11 \text{ g/gmol} \times 1 \text{ atm}}{8.205 \times 10^{-5} \frac{m^3 - atm}{gmol - K} \times 1000 \frac{g}{kg} \times (273 + 25℃) \text{ K}}\right] \times 2.2 \frac{lb}{kg}$$

$$UM_{Benzene} = 279.78 \frac{lb}{year}$$

The total emissions of benzene from the landfill after collection were calculated using AP-42 Section 2.4.4.2 Equation 5:

$$CM_P = \left[UM_P \times \left(1 - \frac{\eta_{col}}{100}\right)\right] + \left[UM_P \times \frac{\eta_{col}}{100} \times \left(1 - \frac{\eta_{cnt}}{100}\right)\right]$$

The second term of the equation accounts specifically for the portion of the collected gas that is sent to a control device. Since the collected gas is sent to a third-party facility for which toxic emissions have been separately evaluated, the second term is assumed to be zero, and only the first term which accounts for volume emissions directly from the landfill's surface is considered. Therefore, Equation 5 simplifies to:

$$CM_P = \left[UM_P \times \left(1 - \frac{\eta_{col}}{100}\right)\right]$$

Where:
CM_p = Controlled mass emissions of pollutant
UM_p = Uncontrolled mass emission of pollutant (as determined using Equations 3 and 4)

η_{col} = Collection efficiency of the landfill gas collection system, percent (57%)*

* The default AP-42 value for the collection efficiency of a GCCS is 75%, however for the purposes of this evaluation, DAQ used 57% collection efficiency since the LFGTE site has received less gas in the past, and the 57% collection rate was previously used by the landfill for emissions reported on the landfill's CY2017 AQEI.

$$\mathrm{CM_{Benzene}} = \left[279.78\ \frac{\text{lb Benzene}}{\text{yr}} \times \left(1 - \frac{57}{100}\right)\right]$$

$$\mathrm{CM_{Benzene}} = 120.31\ \frac{\text{lb Benzene}}{\text{year}}$$

During a previous inspection, it was discovered that the landfill is also operating a diesel-fired leachate pump (ID No. ES-2). Actual expected toxic emissions from the leachate pump's engine were evaluated using AP-42 Chapter 3.3. Example calculation for benzene:

- Emission factor: 9.33 x 10^{-4} lb/mmBtu (AP-42 3.3-2)
- Brake-Specific Fuel Consumption: 0.415 lb fuel/hp-hr (manufacturer specification)
- Diesel Heat Value: 19,300 Btu/lb fuel (AP-42 3.3-1)
- Engine power rating: 80 hp
- Actual operating time: 150 hr/yr based on facility logs
  However, modeling for the Leachate pump were done at 8760 hours per year.

$$\text{Emission Rate} = \frac{9.33 \times 10^{-4}\ \text{lb Benzene}}{\text{mmBtu}} \times \frac{0.415\ \text{lb fuel}}{\text{hp} - \text{hr}} \times \frac{19300\ \text{Btu}}{\text{lb fuel}} \times \frac{\text{mmBtu}}{10^6\ \text{Btu}} \times \frac{8760\ \text{hrs}}{\text{yr}} \times 80\ \text{hp}$$

$$\text{Emission Rate} = 5.24\ \frac{\text{lb Benzene}}{\text{yr}}$$

The landfill submitted a request for the modeling in 2020 for DAQ to model the engine's toxic emissions with emission rates projected at the maximum capacity of the engine operating for 8,760 hours per year. Those maximum emission rates were used to populate the following table.

Total emissions of toxic air pollutants from the landfill and diesel-fired leachate pump were compared to their respective TPERs:

Toxic Air Pollutant	Averaging Period	Landfill Volume Emissions	Diesel-fired Leachate Pump Emissions	Total	TPER	Modeling Required?
1,1,1-Trichloroethane (methyl chloroform)	lb/day	0.14	-----	0.14	250	No
	lb/hr	5.90 x 10^{-3}	-----	5.90 x 10^{-3}	64	No
1,1,2,2-Tetrechloroethane	lb/yr	150.24	-----	150.24	430	No
1,1-Dichloroethene (vinylidene chloride)	lb/day	4.28 x 10^{-2}	-----	4.28 x 10^{-2}	2.5	No
1,2-Dibromoethane (ethylene dibromide)	lb/yr	0.15	-----	0.15	27	No
1,2-Dicholoroethane (ethylene dichloride)	lb/yr	32.72	-----	32.72	260	No
1,3 Butadiene	lb/yr	-----	0.22	0.22	11	No
2-Butanone (MEK)	lb/day	1.13	-----	1.13	78	No
	lb/hr	4.71 x 10^{-2}	-----	4.71 x 10^{-2}	22.4	No

4-Methyl-2-pentanone (MIBK)	lb/day	0.41	-----	0.41	52	No
	lb/hr	1.72×10^{-2}	-----	1.72×10^{-2}	7.6	No
Acetaldehyde	lb/hr	-----	4.91×10^{-4}	4.91×10^{-4}	6.8	No
Acrolein	lb/hr	-----	5.93×10^{-5}	5.93×10^{-5}	0.02	No
Acrylonitrile	lb/day	0.74	-----	0.74	0.4	**YES**
	lb/hr	3.09×10^{-2}	-----	3.09×10^{-2}	0.22	No
Benzene	lb/yr	120.31	5.24	125.55	8.1	**YES**
Benzo(a)pyrene	lb/yr	-----	1.06×10^{-3}	1.06×10^{-3}	2.2	No
Carbon disulfide	lb/day	9.76×10^{-2}	-----	9.76×10^{-2}	3.9	No
Carbon tetrachloride	lb/yr	0.50	-----	0.50	460	No
Chlorobenzene	lb/day	6.22×10^{-2}	-----	6.22×10^{-2}	46	No
Chloroform	lb/yr	2.89	-----	2.89	290	No
p-Dichlorobenzene	lb/hr	2.84×10^{-3}	-----	2.84×10^{-3}	16.8	No
Dichloromethane (methylene chloride)	lb/yr	979.47	-----	979.47	1600	No
	lb/hr	0.11	-----	0.11	0.39	No
Ethyl mercaptan	lb/hr	1.30×10^{-2}	-----	1.30×10^{-2}	0.025	No
Formaldehyde	lb/hr	-----	7.56×10^{-4}	7.56×10^{-4}	0.04	No
n-Hexane	lb/day	1.25	-----	1.25	23	No
Hydrogen sulfide	lb/day	2.67	-----	2.67	1.7	**YES**
Mercury vapor	lb/day	1.29×10^{-4}	-----	1.29×10^{-4}	0.013	No
Methanethiol (methyl mercaptan)	lb/hr	1.10×10^{-2}	-----	1.10×10^{-2}	0.013	No
Tetrachloroethylene (Perchloroethylene)	lb/yr	498.79	-----	498.79	13000	No
Toluene	lb/day	8.00	6.29×10^{-3}	8.01	98	No
	lb/hr	0.33	2.62×10^{-4}	0.33	14.4	No
Trichloroethylene	lb/yr	298.78	-----	298.78	4000	No
Vinyl chloride	lb/yr	369.93	-----	369.93	26	**YES**
Xylene	lb/day	2.83	4.39×10^{-3}	2.83	57	No
	lb/hr	0.12	1.83×10^{-4}	0.12	16.4	No

The TPERs were exceeded for acrylonitrile, benzene, hydrogen sulfide, and vinyl chloride. DAQ AQCB (Nancy Jones) completed air dispersion modeling for the landfill using the emission rates listed above. Emission rates from each site were apportioned based on the individual site's LFG generation rate as provided by the landfill with 2.6% attributed to the Holly Grove landfill, 8.9% attributed to the Phase 1 landfill, and 88.6% attributed to the Phase 2 landfill, with some rounding error.

The following impacts resulted at the property boundary for emissions through CY2045:

Pollutant	Averaging Period	Concentration at Property Boundary ($\mu g/m^3$)	AAL ($\mu g/m^3$)	% AAL
Acrylonitrile	Hourly	11.5	100	12%
	Daily	2.42	30	8%
Benzene	Annual	0.113	0.12	94%
Hydrogen Sulfide	Daily	8.73	120	7%
Vinyl chloride	Annual	0.346	0.38	91%

None of the emitted toxic air pollutants other than those modeled exceed their respective TPERs. The modeled toxics air pollutants did not exceed their respective AALs. Therefore, DAQ has determined that there is not an unacceptable risk to human health. The toxic emissions from the landfill should be periodically re-evaluated to account for potential changes to future operations, waste placement rates, or the addition of new combustion engines.

The addition of the two new insignificant emergency engines (IES-10 and IES-11) at a total of 221.23 hp and operating at a maximum of 500 hours year, will not increase the emissions of benzene such that it will exceed its AAL. Therefore, the addition of these two engines should not cause an unacceptable risk to human health.

9.0 Facility Emissions Review

The facility-wide potential emissions have not changed because of this TV permit renewal. Actual emissions for criteria pollutants and HAPs for the previous five years reporting periods are provided in the header of this permit review.

10.0 Compliance Status

The compliance history for this facility is as follows since the last renewal (April 23, 2020):

- On September 9, 2020, this facility was issued a Notice of Violation because the facility appeared to be in non-compliance with 40 CFR 63 Subpart ZZZZ for failing to conduct the annual maintenance on ES-2 in CY2019, as referenced by Condition 2.1.B.3.g. This issue was resolved according to the 2021 inspection report.
- The facility failed to include a compliance statement about ES-2 in the semi-annual report that was due on July 30, 2020, as required by Condition 2.1.B.3.o. The facility also failed to include the deviation with 40 CFR 63 Subpart ZZZZ on the CY2019 ACC. The facility was issued a Notice of Violation that addressed these violations and requested the resubmittal of the semi-annual report and the ACC. These revised documents were received on September 28, 2020, and the maintenance was performed on ES-2 on September 2, 2020. This issue was resolved.
- On February 23, 2022, this facility was issued a Notice of Deficiency because the semi-annual report as required by Air Quality Permit No. 10408T01, Condition 2.1.B.3.o for the purpose of complying with 15A NCAC 40 CFR 63 Subpart ZZZZ “Stationary Reciprocating Internal Combustion Engines,” was late. The report was due by January 30, 2022, and was received as part of the ACC that was received on February 18, 2022. No additional action was required, and the issue was resolved.

DAQ has reviewed the compliance status of the facility. During the most recent inspection, conducted on 9/20/2024, the facility appeared to be in compliance with all applicable requirements.

11.0 Public Notice/EPA and Affected State(s) 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 .0525, the EPA will have a concurrent 45-day review 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 provided to the public under 02Q .0521 above.

Comments from Public Notice and the 45-day EPA review:
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

12.0 Other Regulatory Considerations

- A P.E. seal is NOT required for this renewal application.
- A zoning consistency determination is NOT required for this renewal application.
- A permit fee is NOT required for this renewal application.
- Removal of General Condition J "Emergency Provisions [40 CFR 70.6(g)]"
  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 decisions[1]. Moreover, per EPA, the removal of these provisions is also consistent with other recent EPA actions involving affirmative defenses[2] 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 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.

  State-enforceable Only
- **Disclosure of Information Relating to Emissions of Fluorinated Chemicals [15A NCAC 02Q. 0308(a); 15A NCAC 02Q.0309(b)]**

  The Permittee shall have an ongoing duty to disclose the 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.

  The disclosure shall describe the identity, quantity, and use of such material to the extent known. DAQ may require the permittee to conduct analysis or testing of fluorinated chemical emissions as necessary to properly evaluate emissions sources at the facility. As used in this condition, the term "fluorinated chemicals" includes but is not limited to per- and polyfluoroalkyl substances (PFAS).

13. Recommendations

The permit renewal application for the David County Municipal Solid Waste Landfill located at 1160 Old US Highway 29, Thomasville, Davidson County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. DAQ has determined this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. DAQ recommends___ _____ of Air Permit No. 10408T02.