

Commonwealth of Virginia VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Stefanie K. Taillon Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus
Director

August 26, 2025

Mr. Peter Smith Vice President of Operations Swift Creek Renewables, LLC 10818 W. County Rd. 72 Midland, TX 79707

Location: Chesterfield County

Registration No.: 52975

Dear Mr. Smith:

Attached is an initial Title V permit to operate your facility pursuant to 9VAC5 Chapter 80 Article 1 of the Virginia Regulations for the Control and Abatement of Air Pollution. The attached permit will be in effect beginning September 1, 2025.

In the course of evaluating the application and arriving at a final decision to issue this permit, the Department of Environmental Quality (DEQ) deemed the application complete on March 21, 2025 and solicited written public comments by placing a newspaper advertisement in the <u>Richmond Times-Dispatch</u> on July 14, 2025. The thirty-day required comment period, provided for in 9VAC5-80-270 expired on August 13, 2025.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and/or civil charges. Please read all permit conditions carefully.

This permit approval to operate shall not relieve Swift Creek Renewables, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the DEQ within 30 days after this case decision notice was mailed or delivered to you. Please consult the relevant regulations for additional requirements for such requests.

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

If this permit was delivered to you by mail, three days are added to the thirty-day period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please contact the regional office at (804) 527-5020.

Sincerely,

James E. Kyle, P.E., Air Permit Manager

Virginia Department of Environmental Quality

(804) 489-6241

James.Kyle@deq.virginia.gov

Piedmont Regional Office

4949-A Cox Road

Glen Allen, VA 23060

(804) 527-5020

JEK/clm/52975-02 Swift Creek Renewables Initial TV .docx

Attachment: Permit

cc: Manager/Inspector – Air Compliance



Commonwealth of Virginia VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Stefanie K. Taillon Secretary of Natural and Historic Resources Michael S. Rolband, PE, PWD, PWS Emeritus Director

Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9VAC5-80-50 through 9VAC5-80-300, of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Swift Creek Renewables, LLC

Facility Name: Swift Creek Renewables Natural Gas (RNG) Facility

Facility Location: 11520 Iron Bridge Road

Chester, VA 23831

Registration Number: 52975

Permit Number: PRO-52975

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act

September 1, 2025	August 31, 2030	
Effective Date	Expiration Date	
6960		
201	August 26, 2025	
James E. Kyle, P.E,. Air Permit Manager	Signature Date	
Virginia Department of Environmental Quality		

(804) 489-6241

James.Kyle@deq.virginia.gov

Piedmont Regional Office
4949-A Cox Road
Glen Allen, VA 23060
(804) 527-5020

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Facility Information

Permittee

Swift Creek Renewables, LLC 10818 W. County Rd. 72 Midland, TX 79707

Responsible Official

Peter Smith Vice President of Operations

Facility

Swift Creek Renewables Natural Gas (RNG) Facility 11520 Iron Bridge Road Chester, VA 23831

Contact Person

Peter Smith Vice President of Operations (314) 578-9898

County-Plant Identification Number: 51-041-52975

Facility Description: NAICS 486210 – Pipeline Transportation of Natural Gas

Swift Creek Renewables, LLC is a renewable natural gas facility which processes landfill gas from the Shoosmith Brothers Inc. Landfill to produce pipeline-quality natural gas. Landfill gas is collected from the landfill and compressed, dehydrated, and filtered through the initial treatment process of the RNG facility. The sulfur in the gas is removed with regenerable liquid removal technology. In the treatment process, VOC, trace components, heavy hydrocarbons, and water vapor that are removed from the gas stream (off-gas) are combusted in the thermal oxidizer. The processed gas passes through the main adsorber for CO₂ removal, followed by O₂ removal through catalytic reaction. The gas is then compressed, dehydrated, and delivered for sale. Any gas that does not meet pipeline quality for sale (off-spec gas) is sent to the back-up flare for combustion. The back-up flare also used for combustion when the treatment system is bypassed.

Because it treats landfill gas from the co-located landfill, the facility is subject to the requirements of MACT Subpart AAAA and must comply with the control requirements, as well as associated recordkeeping and reporting requirements, under this subpart.

Emission Units

Process Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description*	PCD ID	Pollutant Controlled	Applicable Permit Date
RNG	RNG	Gas Upgrading System (2023)	10,000 scfm	Pretreat Stripper Incinerator SA-36 Thermal Oxidizer	TOx	NMOC VOC/HAP	10/13/2022
				MRW Technologies NAF-24-45-2 Backup Flare	BF	NMOC VOC/HAP	
TOx	TOx	Thermal Oxidizer	2.2 MMBtu/hr			NMOC VOC/HAP	10/13/2022
BF	BF	Backup Flare (2023)	317 MMBtu/hr			NMOC VOC/HAP TRS	10/13/2022

^{*}The Size/Rated capacity and PCD efficiency is provided for informational purposes only and is not an applicable requirement.

Process Equipment Requirements - (Emission Unit ID#RNG, TOx, and BF)

Limitations

- 1. **Process Equipment Requirements (RNG, TOx, BF) -** The landfill gas (LFG) collected at the Shoosmith Brothers, Inc. Landfill (Registration No. 50752) shall be routed to a treatment system (Ref. No. RNG) that processes the gas for subsequent sale or use. If the collected LFG cannot be routed to a treatment system (Ref. No. RNG) for subsequent sale or use, the collected LFG shall be routed to a control system that complies with the requirements in 40 CFR 63.1959(b)(2)(iii)(A) or (B). The permittee shall operate the control system at all times when the collected gas is routed to the system.

 (9VAC5-80-110, 9VAC5-40-5935A, 40 CFR 63.1958(e) and (f), and Condition 1 of 10/13/2022 Permit)
- 2. Process Equipment Requirements (RNG, BF) Venting of treated or untreated LFG to the ambient air shall not be allowed. If the treated LFG cannot be processed for subsequent use as pipeline quality natural gas, then the treated gas shall be controlled in accordance with Condition 5. Atmospheric vents located on condensate storage tanks are not part of the treatment system.
 (9VAC5-80-110, 9VAC5-40-5935A, 40 CFR 63.1959(b)(2)(iii)(C) and (D), and Condition 2 of 10/13/2022 Permit)
- 3. **Process Equipment Requirements (RNG)** Sulfur dioxide (SO₂) emissions from the thermal oxidizer (TOx) shall be controlled by the RNG Plant's desulfurization process. (9VAC5-80-110 and Condition 3 of 10/13/2022 Permit)
- 4. **Process Equipment Requirements (RNG, TOx)** Volatile organic compound (VOC) and NMOC emissions from the off-gas stream shall be controlled by a thermal oxidizer (Ref. No. TOx). The thermal oxidizer shall be provided with adequate access for inspection and shall be in operation whenever gas is being routed to the device. (9VAC5-80-110, 9VAC5-40-5935A, 40 CFR 63.1958(e), and Condition 4 of 10/13/2022 Permit)
- 5. **Process Equipment Requirements (RNG, BF)** VOC and NMOC emissions from the Gas Upgrading System purge treatment gas stream and off-specification gas stream shall be controlled by the back-up flare (Ref. No. BF) that meets the standards of 40 CFR 63.11. The back-up flare shall be provided with adequate access for inspection and sufficient combustion capacity.

 (9VAC5-80-110. 9VAC5-40-5935A, 40 CFR 63.1958(e), and Condition 5 of 10/13/2022 Permit)
- 6. **Process Equipment Requirements (TOx, BF)** The permittee shall use good combustion practices at all times to ensure emissions from the emission control devices (Ref. Nos. TOx and BF) are minimized. All operators of the control devices shall be properly trained in the operation and maintenance of the equipment systems in accordance with the guidelines and

procedures established by the equipment manufacturers. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions as required in 40 CFR 63.1955(c). (9VAC5-80-110, 40 CFR 63.1955, and Condition 6 of 10/13/2022 Permit)

- 7. **Process Equipment Requirements (TOx)** The thermal oxidizer (Ref. No. TOx) shall be designed and operated to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 ppmvd as hexane at 3% oxygen. The minimum temperature necessary to achieve the required reduction efficiency or concentration (ppmvd) shall be established by the initial performance test. (9VAC5-80-110, 9VAC5-40-5935A, 40 CFR 63.1959(b)(2)(iii)(B), and Condition 7 of 10/13/2022 Permit)
- 8. **Process Equipment Requirements (TOx)** The thermal oxidizer (Ref. No. TOx) shall achieve a VOC reduction efficiency of not less than 99% on a mass basis. The reduction efficiency shall be demonstrated by the initial performance test. (9VAC5-80-110 and Condition 8 of 10/13/2022 Permit)
- 9. **Process Equipment Requirements (TOx)** The thermal oxidizer (Ref. No. TOx) shall be operated such that the three-hour average temperature, as measured at the combustion chamber outlet, be maintained at or above the temperature during the initial performance test. The permittee shall calculate the 3-hour average combustion temperature in accordance with 40 CFR 63.1983(c)(1)(i) except for data during the event listed in §63.1975. The gases in the thermal oxidizer combustion chamber shall have a minimum retention time of one second at or above the minimum specified combustion chamber temperature. (9VAC5-80-110, 9VAC5-40-5935, 40 CFR 63.1975, 40 CFR 63.1959(b)(2)(iii)(B)(2), and Condition 13 of 10/13/2022 Permit)
- 10. **Process Equipment Requirements (BF)** The back-up flare (Ref. No. BF) shall be designed and operated to reduce NMOC and VOC by 98 weight percent. (9VAC5-80-110, 9VAC5-40-5935A, 40 CFR 63.1959(b)(2)(iii), and Condition 9 of 10/13/2022 Permit)
- 11. **Process Equipment Requirements (BF)** The back-up flare (Ref. No. BF) shall operate no more than 720 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9VAC5-80-110 and Condition 14 of 10/13/2022 Permit)
- 12. **Process Equipment Requirements (BF)** The back-up flare (Ref. No. BF) shall operate at all times with a minimum net heating value of the gas to be combusted of 7.45 MJ/scm (200 Btu per standard cubic foot) of the gas. The net heating value of the inlet to the back-up flare

shall be determined annually. The net heating value shall be calculated using the equation in 40 CFR 63.11(b)(6).

(9VAC5-80-110, 40 CFR 63.1959(b)(2)(iii)(A), and Condition 15 of 10/13/2022 Permit)

13. Flare Exit Velocity Requirements - (BF) - The back-up flare (Ref. No. BF) shall operate with an exit velocity less than the velocity calculated from the following equation:

$$Log_{10}(Vmax) = (H_T + 28.8)/31.7$$

where: Vmax = the maximum permitted velocity < 122 m/sec (400 ft/sec); and

 H_T = the net heating value (Condition 12).

The actual velocity of the back-up flare (Ref. No. BF) shall be determined annually by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross-sectional area of the flare tip.

(9VAC5-80-110, 40 CFR 63.11(b)(7), 40 CFR 63.1959(b)(2)(iii)(A), and Condition 16 of 10/13/2022 Permit)

14. **Process Equipment Requirements - (TOx, BF) -** The approved fuel for use by the pilot flame burners in the emissions control devices (Ref. Nos. TOx and BF) is natural gas. The use of other fuels shall be considered a change in the method of operation of the affected emissions control device and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.

(9VAC5-80-110 and Condition 17 of 10/13/2022 Permit)

- 15. **Process Equipment Requirements (TOx, BF) -** The approved fuels for incineration in the thermal oxidizer (Ref. No. TOx) are off-gas produced from the Gas Upgrading System process and auxiliary natural gas. Approved fuel for combustion in the back-up candlestick flare (Ref. No. BF) is purge treatment gas and off-specification gas. A change in the fuel supplied to the associated emission control device shall be considered a change in the method of operation for the emission control device and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change. (9VAC5-80-110 and Condition 18 of 10/13/2022 Permit)
- 16. **Process Equipment Requirements (TOx) -** Emissions from the operation of the thermal oxidizer (Ref. No. TOx) shall not exceed the limits specified below:

Pollutant	Lb/hr	Tons/year
Nitrogen Oxides (as NO ₂)	0.3	1.2
Carbon Monoxide	0.2	0.6

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 4, 6-9, 14, 15, 22, and 23. (9VAC5-80-110 and Condition 20 of 10/13/2022 Permit)

17. **Process Equipment Requirements - (BF) -** Emissions from the operation of the Back-up Flare (Ref. No. BF) shall not exceed the limits specified below:

Pollutant	Lb/hr	Tons/year
Sulfur Dioxide	88.6	31.9
Nitrogen Oxides (as NO ₂)	22.5	8.1
Carbon Monoxide	102.4	36.9

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 5, 6, 11, 12, 13, 14, 15, and 22. (9VAC 5-80-110 and Condition 21 of 10/13/2022 Permit)

- 18. **Process Equipment Requirements (TOx) -** Visible emissions from the thermal oxidizer (Ref. No. TOx) shall not exceed five percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).

 (9 VAC 5-80-110 and Condition 22 of 10/13/2022 Permit)
- 19. **Process Equipment Requirements (BF)** The flare (Ref. No. BF) shall be operated with no visible emissions, as determined by 40 CFR 60, Appendix A, Method 22, except for periods not to exceed a total of five minutes during two consecutive hours. (9VAC5-80-110, 40 CFR 63.11(b)(4), and Condition 23 of 10/13/2022 Permit)
- 20. **Process Equipment Requirements (RNG, TOx, BF) -** At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions.

The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions, with respect to air pollution control equipment and process equipment which affect such emissions:

- a. Develop a maintenance schedule and maintain records of all scheduled and non-scheduled maintenance.
- b. Maintain an inventory of spare parts.

- c. Have available written operating procedures for equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum.
- d. Train operators in the proper operation of all such equipment and familiarize the operators with the written operating procedures, prior to their first operation of such equipment. The permittee shall maintain records of the training provided including the names of trainees, the date of training and the nature of the training.

Records of maintenance and training shall be maintained on site for a period of five years and shall be made available to DEQ personnel upon request. (9VAC5-80-110 and Condition 33 of 10/13/2022 Permit)

21. Process Equipment Requirements - MACT Subpart AAAA – (RNG, TOx, BF) - The provisions of this permit implementing 40 CFR 63 Subpart AAAA apply at all times, including periods of startup, shutdown or malfunction. During periods of startup, shutdown, and malfunction, the facility must comply with the work practice specified in §63.1958(e)(1) in lieu of the compliance provisions in §63.1960. (9VAC5-80-110, 9VAC5-40-5980 and §63.1960(e))

Monitoring

- 22. Process Equipment Requirements (TOx, BF) Each control device (Ref. Nos. TOx and BF) shall maintain a continuous pilot flame during all operations involving the associated control device. Each pilot flame shall be equipped with a DEQ-approved heat- or flame-sensing monitoring device to detect the presence of the pilot flame. In addition, each control device shall be equipped with an automatic alarm system that shall provide immediate notification to appropriate personnel of flame failure or malfunction. The permittee shall record all periods of operation when the pilot flame is absent. The monitoring devices shall be installed, maintained, calibrated, and operated according to approved procedures which shall include, as a minimum, the manufacturer's written recommendations. The heat- or flame-sensing monitoring devices shall be provided with adequate access for inspection, and shall be in operation when the control device is operating.

 (9VAC5-80-110, 9VAC5-40-5965, 40 CFR 63.1961(c)(1), and Condition 10 of 10/13/2022 Permit)
- 23. **Process Equipment Requirements (TOx)** The thermal oxidizer shall be equipped with a temperature monitoring device equipped with a continuous recorder at or near the chamber exit to monitor and record the chamber temperature (in °C). The temperature monitoring device shall have a minimum accuracy of ±1% of the temperature being measured expressed in °C or ±0.5 °C, whichever is greater. The temperature shall be recorded at 15-minute intervals to calculate three-hour temperature averages during periods when the thermal oxidizer is in operation. Thermocouples utilized by the monitoring system shall be calibrated annually, at a minimum. The temperature monitoring device shall be installed, maintained, calibrated, and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The temperature

monitoring device shall be provided with adequate access for inspection and shall be in operation when the thermal oxidizer is operating.

(9VAC5-80-110, 9VAC5-40-5965, 40 CFR 63.1961(b)(1) and Condition 11 of 10/13/2022 Permit)

- 24. Process Equipment Requirements MACT Subpart AAAA (TOx, BF) In order to comply with the requirements of §63.1959(b)(2)(iii)(A) or (B), the equipment in 40 CFR 63.1961(b) and (c) must be installed, calibrated, maintained, and operated according to the manufacturer's specifications and 40 CFR 63.1961(b) and (c). (9VAC5-80-110, 9VAC5-40-5965, and 40 CFR 63.1961(b) and (c))
- 25. Process Equipment Requirements MACT Subpart AAAA (RNG, TOx, BF) The permittee must prepare, maintain and operate in accordance with a site-specific treatment system monitoring plan as specified in §63.1983(b)(5). Monitoring device installation, calibration, maintenance, and operation must be in accordance with §63.1961(g) at a minimum.

(9VAC5-80-110, 9VAC5-40-5965, and §63.1961(g))

26. Process Equipment Requirements - MACT Subpart AAAA – (RNG, TOx, BF) – The monitoring requirements in Conditions 22-25 apply at all times except as provided in 40 CFR 63.1961(h).

(9VAC5-80-110, 9VAC5-40-5965, and 40 CFR 63.1961(h))

27. Process Equipment Requirements - MACT Subpart AAAA – (TOx, BF) – The permittee shall demonstrate compliance using performance testing, continuous parameter monitoring, and other credible evidence. Continuous parameter monitoring data collected under 40 CFR 63.1961(b)(1) and (c)(1) are used to demonstrate compliance with the operating standards for control systems. If a deviation occurs, the permittee has failed to meet the control device operating standards described in this subpart and have deviated from the requirements of this subpart.

(9VAC5-80-110, 9VAC5-40-5955, and 40 CFR 63.1964(b))

Recordkeeping

- 28. **Process Equipment Requirements (TOx, BF)** The permittee shall keep a record log documenting all occurrences of flame malfunction for the thermal oxidizer (Ref. No. TOx) and/or back-up flare (Ref. No. BF) during operation of the respective control device. The record log should include the name of the person reporting the occurrence; the date, time, and duration of the occurrence; and a description of corrective actions taken, including date and time the repairs were completed. The log book shall be made available for inspection by the DEQ and be current for the most recent five years.
 - (9VAC5-80-110 and Condition 12 of 10/13/2022 Permit)
- 29. Process Equipment Requirements (RNG, TOx, BF) The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance

with this permit. The content and format of such records shall be arranged with the Piedmont Regional Office. These records shall include, but are not limited to:

- a. Annual hours of operation of the back-up flare (Ref. No. BF), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
- b. Records of all periods of operation during which the pilot flame is absent, as required by Condition 22;
- c. Monitoring records of the recorded three-hour combustion chamber temperature averages (in °C) for the thermal oxidizer (Ref. No. TOx) as required by Condition 23 of the permit;
- d. The record logbook documentation (or electronic monitoring records) for all malfunction episodes to the thermal oxidizer (Ref. No. TOx) and/or back-up flare (Ref. No. BF) as required by Condition 28 of the permit;
- e. The number of times and the length of each occurrence where visible emissions are observed from the back-up flare (BF).
- f. Records of all heat content and exit velocity determinations for the back-up flare (BF), as well as any other information necessary to determine compliance with Conditions 12 and 13:
- g. Scheduled and unscheduled maintenance and operator training; and
- h. The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record;

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9VAC5-80-110, 9VAC5-50-50, and Conditions 24 and 34 of 10/13/2022 Permit])

30. Process Equipment Requirements - MACT Subpart AAAA – (TOx, BF) – Records – Unless stated otherwise, records in this condition shall be kept for at least 5 years up-to-date and shall be readily accessible. Off-site records may be maintained if they are retrievable

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within 4 hours. Either paper copy or electronic formats are acceptable. Alternative records shall be kept for this timeline as provided in §63.1981(d)(2).

- a. The following records shall be kept for the life of the control system equipment as measured during the initial performance test or compliance determination. Records of subsequent tests or monitoring must be maintained for a minimum of 5 years. Records of the control device vendor specifications must be maintained until removal.
 - i. The flare type (i.e., steam-assisted, air-assisted, or non-assisted), all visible emission readings, heat content determination, flow or bypass flowrate measurements, and exit velocity determinations made during the performance test as specified in §63.11.
 - ii. The average temperature measured at least every 15 minutes and averaged over the same time period of the performance test.
 - iii. The percent reduction of NMOC determined as specified in 40 CFR 63.1959(b)(2)(iii).
 - iv. Description of the operation of the control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures specified under §63.1961(d). Continuous records of the flare pilot flame or flare flame monitoring specified under §63.1961(c).
 - v. Records of all periods of operations during which the pilot flame of the flare flame is absent.
- b. Records of the equipment operating parameters monitoring at the frequency specified in the approved site-specific treatment system monitoring plan as specified in §63.1983(b)(5)(ii).
- c. Records of the equipment operating parameters specified to be monitored in §63.1961.
- d. Records for periods of operation during which the parameter boundaries established during the initial performance test are exceeded.
- e. Continuous records of the indication of flow to the treatment system and control system and the indication of bypass flow or records of monthly inspections of car-seals or lock-and-key configurations used to seal bypass lines, specified under §63.1961.
- f. Records of periods when the control device or treatment system is not operating.

- g. Records of the date, time, and duration of each startup and/or shutdown period, recording the periods when the affected source was subject to the standard applicable to startup and shutdown. In the event that an affected unit fails to meet an applicable standard, the records of the information in §63.1983(c)(7)(i)-(iii) shall be maintained.
- h. Records of the written procedures required by §63.8(d)(2), in lieu of the requirements specified in §63.8(d)(3), for the life of the affected source or until the affected source is no longer subject to the provisions of this part. If the performance evaluation plan is revised, previous (i.e., superseded) versions of the performance evaluation plan shall be maintained for a period of 5 years after each revision to the plan. The program of corrective action must be included in the plan required under §63.8(d)(2).
- i. All control system exceedances of the operational standards in §63.1958, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.

(9VAC5-80-110, 9VAC5-40-5970 and 40 CFR 63.1983)

Testing

- 31. Process Equipment Requirements (RNG, TOx, BF) The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the DEQ or EPA, test ports shall be provided at the appropriate locations. (9VAC5-80-110, 9VAC5-40-5965, 40 CFR 60.8(e), and 40 CFR 63.7(d) and Condition 28 of 10/13/2022 Permit)
- 32. **Process Equipment Requirements (RNG, TOx, BF) -** If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ. (9VAC5-80-110)

Reporting

- 33. Process Equipment Requirements MACT Subpart AAAA (TOx, BF) Reports The following reports shall be submitted:
 - a. Semi-annual reports shall be submitted that contain the information required in §63.1981(h). This information includes, but is not limited to, the information in paragraphs (h)(1)(iii), (h)(2), and (h)(3), as well as reportable exceedances as specified in §63.1983(c)(1)(i).
 - b. Performance test reports for the RNG thermal oxidizer (TOx) and flare (BF) shall be submitted and shall include all the information required in §63.1981(i).

Each report shall be submitted to the Piedmont Regional Office. Reports shall be submitted in accordance with §63.1981(l) except as provided in §63.1981(m) and (n). A copy of each report shall be submitted also to EPA Region 3 (Email: R3_APD_Permits@epa.gov) except for reports submitted electronically in accordance with §63.1981(l). (9VAC5-80-110, 9VAC5-40-5970 and §63.1981)

Insignificant Emission Units

34. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9VAC5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9VAC5-80-720B)	Rated Capacity (9VAC5-80-720C)
	None Identified			

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9VAC5-80-110. (9VAC5-80-110)

Permit Shield & Inapplicable Requirements

35. **Permit Shield & Inapplicable Requirements** - Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
	None Identified.	

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act or (ii) the DEQ pursuant to §10.1-1307.3 or §10.1-1315 of the Virginia Air Pollution Control Law.

(9VAC5-80-110 and 9VAC5-80-140)

General Conditions

36. **General Conditions - Federal Enforceability** - All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable. (9VAC5-80-110)

37. General Conditions - Permit Expiration

- a. This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9VAC5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
- b. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- c. If an applicant submits a timely and complete application for an initial permit or renewal under 9VAC5-80-80 F, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9VAC5 Chapter 80, until the DEQ takes final action on the application under 9VAC5-80-150.
- d. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9VAC5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9VAC5 Chapter 80.
- e. If an applicant submits a timely and complete application under section 9VAC5-80-80 for a permit renewal but the DEQ fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9VAC5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- f. The protection under subsections F 1 and F 5 (ii) of section 9VAC5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9VAC5-80-80 D, the applicant fails to submit by the deadline specified in writing by the DEQ any additional information identified as being needed to process the application.

(9VAC5-80-80, 9VAC5-80-110 and 9VAC5-80-170)

38. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

- a. The date, place as defined in the permit, and time of sampling or measurements;
- b. The date(s) analyses were performed;
- c. The company or entity that performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of such analyses; and
- f. The operating conditions existing at the time of sampling or measurement.

(9VAC5-80-110)

- 39. **General Conditions -Recordkeeping and Reporting** Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. (9VAC5-80-110)
- 40. **General Conditions -Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to the DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
 - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
 - b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedances of emissions limitations or operational restrictions;
 - ii. Excursions from control device operating parameter requirements, as documented by continuous emission monitoring or periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semiannual reporting period."

(9VAC5-80-110)

- 41. General Conditions Annual Compliance Certification Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to the Environmental Protection Agency (EPA) and the DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a) (3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9VAC5-80-80 G, and shall include:
 - a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
 - b. The identification of each term or condition of the permit that is the basis of the certification;
 - c. The compliance status;
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
 - e. Consistent with subsection 9VAC5-80-110, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
 - f. Such other facts as the permit may require to determine the compliance status of the source; and

One copy of the annual compliance certification shall be submitted to the EPA in electronic format only. The certification document should be sent to the following electronic mailing address:

R3 APD Permits@epa.gov

(9VAC5-80-110)

- 42. **General Conditions Permit Deviation Reporting -** The permittee shall notify the Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semiannual compliance monitoring report pursuant to Condition 40 of this permit. (9VAC5-80-110 F. 2)
- 43. **General Conditions Failure/Malfunction Reporting -** In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall no later than four daytime business hours after the malfunction is discovered, notify the Piedmont Regional Office of such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Piedmont Regional Office. (9VAC5-80-110 and 9VAC5-20-180)
- 44. **General Conditions Failure/Malfunction Reporting -** Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9VAC5-40-41 or 9VAC5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9VAC5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the DEQ semiannually. All reports shall include the following information:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9VAC5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
 - d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9VAC5-40-50 C and 9VAC5-50-50 C require written reports within 14 days of the discovery of the malfunction. (9VAC5-80-110, 9VAC5-20-180 C, and 9VAC5-50-50)

- 45. **General Conditions Severability -** The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9VAC5-80-110)
- 46. **General Conditions Duty to Comply -** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is ground for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9VAC5-80-110)
- 47. **General Conditions Need to Halt or Reduce Activity not a Defense -** It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (9VAC5-80-110)
- 48. **General Conditions Permit Modification** A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9VAC5-80-50, 9VAC5-80-1100, 9VAC5-80-1605, or 9VAC5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9VAC80-110, 9VAC5-80-190, and 9VAC5-80-260)
- 49. **General Conditions Property Rights -** The permit does not convey any property rights of any sort, or any exclusive privilege. (9VAC5-80-110)
- 50. **General Conditions Duty to Submit Information** The permittee shall furnish to the DEQ, within a reasonable time, any information that the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the DEQ along with a claim of confidentiality. (9VAC5-80-110)

- 51. **General Conditions Duty to Submit Information -** Any document (including reports) required in a permit condition to be submitted to the DEQ shall contain a certification by a responsible official that meets the requirements of 9VAC5-80-80 G. (9VAC5-80-110)
- 52. **General Conditions Duty to Pay Permit Fees** The owner of any source for which a permit was issued under 9VAC5-80-50 through 9VAC5-80-300 shall pay annual emissions fees, as applicable, consistent with the requirements of 9VAC5-80-310 through 9VAC5-80-350 and annual maintenance fees, as applicable, consistent with the requirements of 9VAC5-80-2310 through 9VAC5-80-2350. (9VAC5-80-110, 9VAC5-80-310 et seq., and 9VAC5-80-2310 et seq.)
- 53. **General Conditions Fugitive Dust Emission Standards** During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
 - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or similar operations;
 - d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
 - e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9VAC5-80-110 and 9VAC5-50-90)

54. **General Conditions - Startup, Shutdown, and Malfunction -** At all times, including periods of startup, shutdown, and soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are

being used will be based on information available to the DEQ, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9VAC5-80-110 and [9VAC5-50-20 E or 9VAC5-40-20 E])

- 55. General Conditions Alternative Operating Scenarios Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9VAC5 Chapter 80, Article 1. (9VAC5-80-110)
- 56. **General Conditions Inspection and Entry Requirements -** The permittee shall allow the DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9VAC5-80-110)

- 57. **General Conditions Reopening for Cause** The permit shall be reopened by the DEQ if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9VAC5-80-80 F. The conditions for reopening a permit are as follows:
 - a. The permit shall be reopened if the DEQ or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

- b. The permit shall be reopened if the administrator or the DEQ determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the DEQ if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9VAC5-80-110 D.

(9VAC5-80-110)

58. **General Conditions - Permit Availability -** Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to the DEQ upon request. (9VAC5-80-110 and 9VAC5-80-150)

59. General Conditions - Transfer of Permits

- a. No person shall transfer a permit from one location to another, unless authorized under 9VAC5-80-130, or from one piece of equipment to another.
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the DEQ of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9VAC5-80-200.
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the DEQ of the change in source name within 30 days of the name change and shall comply with the requirements of 9VAC5-80-200.

(9VAC5-80-110 and 9VAC5-80-160)

60. General Conditions - Permit Revocation or Termination for Cause - A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9VAC5 Chapter 80 Article 1. The DEQ may suspend, under such conditions and for such period of time as the DEQ may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.

(9VAC5-80-110, 9VAC5-80-190 C, and 9VAC5-80-260)

61. **General Conditions - Duty to Supplement or Correct Application -** Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional

information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9VAC5-80-110 and 9VAC5-80-80 E)

- 62. **General Conditions Stratospheric Ozone Protection -** If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (9VAC5-80-110 and 40 CFR Part 82)
- 63. **General Conditions Asbestos Requirements -** The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9VAC5-60-70 and 9VAC5-80-110)
- 64. **General Conditions Accidental Release Prevention** If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (9VAC5-80-110 and 40 CFR Part 68)
- 65. **General Conditions Changes to Permits for Emissions Trading -** No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9VAC5-80-110)
- 66. **General Conditions Emissions Trading -** Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a caseby-case approval of each emissions trade:
 - a. All terms and conditions required under 9VAC5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9VAC5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9VAC5-80-50 through 9VAC5-80-300.

(9VAC5-80-110)