WESTERN NORTH CAROLINA REGIONAL AIR QUALITY AGENCY

AIR QUALITY PERMIT

Until such time as this permit expires or is modified or revoked, the below named Permittee is authorized to operate, as outlined in Part I, "Air Quality Title V Operation Permit," and to construct and operate, as outlined in Part II, "Air Quality Construction and Operation Permit," the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of the Western North Carolina Regional Air Quality Agency Air Quality Code (WNCRAQA Code) and is subject to all requirements therein.

Pursuant to the WNCRAQA Code Chapter 17, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the Western North Carolina Regional Air Quality Agency and received an Air Quality Permit, except as provided in this permit.

Permittee:

Buncombe County Landfill II

Facility ID: Facility Site Location: City, State, Zip:	11-542 81 Panther Branch Road Alexander, NC 28701	
Facility Mailing Address: City, State, Zip: Permit Number: Essue Date: Effective Date: Renewal Application Due Date: Expiration Date:	81 Panther Branch Road Alexander, NC 28701 11-542-21 January 11, 2022 February 1, 2022 July 31, 2026 January 31, 2027	
	Ashley J. Featherstone Director	

TABLE OF CONTENTS

PART I - AIR QUALITY TITLE V OPERATION PERMIT

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

SECTION 2 - SPECIFIC CONDITIONS AND LIMITATIONS

- 2.1 Emission Source Specific Conditions and Limitations
- 2.2 Multiple Emission Source Specific Conditions and Limitations

SECTION 3 - GENERAL CONDITIONS AND LIMITATIONS

ATTACHMENTS List of Insignificant Activities List of Acronyms

Permit No. 11-542-21 Page 3 of 25

PART I - AIR QUALITY TITLE V OPERATION PERMIT

The Western North Carolina Regional Air Quality Agency (WNCRAQA), the United States Environmental Protection Agency (EPA), and citizens as defined under the Federal Clean Air Act have the authority to enforce the terms, conditions, and limitations contained in Part I of this permit unless otherwise specified.

Under the WNCRAQA Code Chapter 17, the operation of emission source(s) and associated air pollution control device(s) listed in Part I of this permit is based on plans, specifications, operating parameters, and other information as submitted in the Air Quality Permit Application.

SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S)

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

Emission Source ID	Emission Source Description	Control Device ID	Control Device Description
ES-C1	Municipal Solid Waste Landfill, consisting of a 121 acre disposal area	CD1	One landfill gas collection and control system with one two stage landfill gas-fired candlestick-type flare with variable flow rates (300 scfm minimum flow rate and 3,000 scfm maximum flow rate, 91 MMBtu/hr heat input capacity, ID No. CD-1)
ES-G1	One /Jenbacher electrical generator set, Model JGS 420, fired by landfill gas, with a maximum rated heat input capacity of 17 MMBtu/hr (engine output capacity 1,966 HP, generator output capacity 1,466 kW).	NA	NA

SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS

The emission sources listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

2.1: Emission Sources Specific Limitations and Conditions

A. Emission Source ID C-1- Municipal Solid Waste Landfill, consisting of a 121 acre disposal area, with emissions controlled by a landfill gas collection and control system with one landfill gas-fired candlestick-type flare (91MMBtu/hr heat input capacity)

The following table provides a summary of limitation(s) and standard(s) for the emission source(s) referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Nonmethane organic compounds (NMOC)	See Section 2.1.A(1) below	40 CFR Part 62 Subpart OOO

Permit No. 11-542-21 Page 4 of 25

Asbestos	Waste disposal management practices	WNCRAQA Code 4.1110 40 CFR Part 61 Subpart M
Sulfur Dioxide	Sulfur dioxide emissions from CD1 shall not exceed 2.3 pounds per million BTU heat input.	WNCRAQA Code 4.0516
Visible Emissions	Visible emissions from CD1 shall not exceed 20% opacity.	WNCRAQA Code 4.0521

1. 40 CFR Part 62 Subpart OOO – Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014

Emission Limitations/Standards [40 CFR Part 62 Subpart OOO]

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in 40 CFR Part 62 Subpart OOO Federal Plan Requirements for Municipal Solid Waste Landfills That Commenced Construction On or Before July 17, 2014 and Have Not Been Modified or Reconstructed Since July 17, 2014
- b. The Permittee shall calculate a non-methane organic compound (NMOC) emission rate for the landfill using the procedures specified in Section 2.1.A.1.d of this permit. The NMOC emission rate shall be recalculated annually, except as provided in Section 2.1.A.1.m of this permit.:
 - i. If the calculated NMOC emission rate is less than 34 megagrams per year, the owner or operator shall:
 - A. Submit an annual emission report, except as provided for in Section 2.1.A.1.m of this permit; and
 - B. Recalculate the NMOC emission rate annually using the procedures specified in Section 2.1.A.1.d of this permit until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed.
 - 1. If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year upon recalculation, the owner or operator must either: install a collection and control system in compliance with Section 2.1.A.1.b.ii of this permit, or calculate NMOC emissions using the next higher tier in §62.16718; or conduct a surface emission monitoring demonstration using the procedures specified in §62.16718(a)(6).
 - 2. If the landfill is permanently closed, a closure notification shall be submitted to the Agency as provided for in §60.757(d).
 - ii. If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year using Tier 1, 2, or 3 procedures, the Permittee shall:
 - A. Submit a collection and control system design plan prepared by a professional engineer who is registered in the State of North Carolina within one year as specified in §62.16724(d), except for exemptions allowed under §62.16711(g)(3); calculate NMOC emissions using a higher tier in §62.16718; or conduct a surface emission monitoring demonstration using the procedures specified in §62.16718(a)(6).
 - 1. The collection and control system as described in the plan shall meet the design requirements of Section 2.1.A.1.b.ii.(B) of this permit.
 - 2. The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of §§62.16716 through 62.16726 proposed by the Permittee.
 - 3. The collection and control system design plan shall either conform with specifications for active collection systems in §62.16728 or include a demonstration to the Agency's satisfaction of the sufficiency of the alternative provisions to §62.16728.
 - B. Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (b)(2) or (3) of §62.16714 within 30 months after the first annual report in which the emission rate equals or exceeds 34 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 34 megagrams per year, as specified in §62.16724(c)(l) or (2), or the most recent NMOC emission rate report in which

Permit No. 11-542-21 Page 5 of 25

the NMOC emission rate equals or exceeds 34 megagrams per year base on Tier 2, if the Tier 4 surface emissions monitoring shows a surface methane emission concentration of 500 parts per million methane or greater as specified in §62.16724(d)(4)(iii).

- 1. An active collection system shall:
 - Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the gas control or treatment system equipment;
 - b. Collect gas from each area, cell, or group of cells in the landfill in which the initial solid waste has been placed for a period of
 - i. 5 years or more if active; or
 - ii. 2 years or more if closed at final grade.
 - c. Collect gas at sufficient extraction rate; and
 - d. Be designed to minimize off-site migration of subsurface gas.
- 2. A passive collection system shall:
 - a. Comply with the provisions specified in Sections 2.1.A.1.b.ii.(B)(l)(a), (b) and (d) of this permit; and
 - b. Be installed with liners on the bottom and all sides in all areas in which gas is to be collected. The liners shall be installed as required under §258.40.
- 3. Route all the collected gas to a control system that complies with the requirements in either paragraph (a), (b) or (c) below.
 - a. A non-enclosed flare designed and operated in accordance with the parameters established in §60.18 except as noted in §62.16722(d);
 - b. A control system designed and operated to reduce NMOC by 98 weight percent; or when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 partsper-million by volume, dry basis as hexane at 3-percent oxygen or less. The reduction efficiency or concentration in parts-per-million by volume must be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in §62.16718(d). The performance test is not required for boilers and process heaters with design heat input capacities equal to or greater than 44 megawatts that burn landfill gas for compliance with this subpart.
 - i. If a boiler or process heater is used as the control device, the landfill gas stream must be introduced into the flame zone.
 - ii. The control device must be operated within the parameter ranges established during the initial or most recent performance test. The operating parameters to be monitored are specified in §62.16722.
 - iii. Legacy controlled landfills or landfills in the closed landfill subcategory that have already installed control systems and completed initial or subsequent performance tests may comply with this subpart using the initial or most recent performance test conducted to comply with 40 CFR part 60, subpart WWW; 40 CFR Part 60, subpart GGG; or a state plan implementing subpart Cc of part 60, is sufficient for compliance with this subpart.
 - c. Route the collected gas to a treatment system that processes the collected gas for subsequent sale or beneficial use such as fuel for combustion, production of vehicle fuel, production of high-Btu gas for pipeline injection, or use as a raw material in a chemical manufacturing process. Venting of treated landfill gas to the ambient air is not allowed. If the treated landfill gas cannot be routed for subsequent sale or beneficial use, then the treated landfill gas must be controlled according to either paragraph (3)(a) or (b) of this section.
- 4. Operate the collection and control device installed to comply with this subpart in accordance with the provisions of §§62.16716, 62.16720 and 62.16722.

Testing [40 CFR Part 62 Subpart OOO]

c. If emission testing is required, the testing shall be performed in accordance with §62.16718 and General Condition JJ located in the General Conditions in Section 3 of the permit. If the results are

above the limits given in 40 CFR 62, Subpart OOO, the Permittee shall be deemed in noncompliance.

- d. The Permittee shall calculate the NMOC emission rate using the equation provided in paragraph i below. The values to be used in both equations are 0.05 per year for k, 170 cubic meters per megagram for L_0 , and 4,000 parts per million by volume as hexane for the C_{NMOC} .
 - The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_oM_i(e^{-kt} i)(C_{NMOC})(3.6 \times 10^{-9})$$

Where,

 M_{NMOC} = Total NMOC emission rate from the landfill, megagrams per year k = methane generation rate constant, year⁻¹

 L_0 = methane generation potential, cubic meters per megagram solid waste

M_i = mass of solid waste in the ith section, megagrams

 t_i = age of the i^{th} section, years

C_{NMOC} = concentration of NMOC, parts per million by volume as hexane

 $3.6 \times 10^{-9} = conversion factor$

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for Mi if documentation of the nature and amount of such wastes is maintained.

- ii. If the NMOC emission rate calculated is less than 34 megagrams per year, then the landfill owner shall submit an emission rate report annually as required under Section 2.1.A.b.i.
- iii. If the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, then the landfill owner shall either comply with b.ii. of this section, or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the Tier 2 Sampling procedures provided in §62.16718(a)(3).
- iv. If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 34 megagrams per year, then the Permittee shall either comply with Section 2.1.A.b.ii, or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the Tier 3 Sampling procedure specified in paragraph §62.16718(a)(4).
- v. If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 34 megagrams per year, the owner or operator shall comply with Section 2.1.A.b.i. or use Tier 4 testing in accordance with §62.16718(a)(6).
- vi. The Permittee may use other methods to determine the NMOC concentration or a site-specific k as an alternative to the methods required in paragraph i. above if the Method has been approved by the Agency.

Monitoring [40 CFR Part 62 Subpart OOO]

- e. For the landfill gas collection and control system, the Permittee shall install a sampling port and a thermometer, other temperature measuring device, or an access port for temperature measurements at each wellhead, and:
 - i. Measure the gauge pressure in the gas collection header at each individual well on a monthly basis as provided in §62.16722(a)(1).
 - ii. Monitor each well for nitrogen or oxygen concentration in the landfill gas on a monthly basis as provided in §62.16722(a)(2) as follows:
 - A. The nitrogen level shall be determined using EPA Method 3C of Appendix A-2 of 40 CFR Part 60, unless an alternative test method is established as allowed by §62.16724(d)(2).
 - B. Unless an alternative test method is established as allowed by §62.16724(d)(2), the oxygen level must be determined by an oxygen meter using EPA Method 3A of appendix A-7 of 40 CFR part 60, EPA Method 3C of appendix A-7 of 40 CFR part 60, or ASTM D6522-11. Determine the oxygen level by an oxygen meter using EPA Method 3A, 3C, or ASTM D6522-11 (if sample location is prior to combustion) except that:
 - 1. The span shall be set between 10 and 12 percent oxygen.

Permit No. 11-542-21 Page 7 of 25

- 2. A data recorder is not required.
- 3. Only two calibration gases are required, a zero and span.
- 4. A calibration error check is not required.
- 5. The allowable sample bias, zero drift, and calibration drift are ± 10 percent.
- C. A portable gas composition analyzer may be used to monitor the oxygen levels provided:
 - 1. The analyzer is calibrated.
 - 2. The analyzer meets all quality assurance and quality control requirements for EPA Method 3A or ASTM D6522-11.
- iii. Monitor each well for temperature of the landfill gas on a monthly basis as provided in §62.16722(a)(3). The temperature measuring device must be calibrated annually using the procedure in 40 CFR part 60, appendix A-1, EPA Method 2, section 10.3.
- f. For the landfill gas collection and control system, the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications the following equipment:
 - i. A heat sensing device, such as an ultraviolet beam sensor or a thermocouple, at the pilot light or the flame itself to indicate the continuous presence of a flame, as provided in §62.16722(c);
 - ii. A device that records flow to or bypass of the flare. The owner or operator shall either:
 - A. Install, calibrate, and maintain a landfill gas flow rate measuring device that shall record the flow to the control device at least every 15 minutes, as provided in §62.16722(c)(2)(i); or
 - B. Secure the bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line, as provided in §62.16722(c)(2)(ii).

Recordkeeping [40 CFR Part 62 Subpart OOO]

- g. Except as provided in §62.16724(d)(2), the Permittee shall keep for at least five years up-to-date, readily accessible, on-site records (written or electronic) of the maximum design capacity, the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within four hours. Either paper copy or electronic formats are acceptable.
- h. Except as provided in §62.16724(d)(2), the Permittee shall keep up-to-date, readily accessible records for the life of the control equipment of the data measured during the initial performance test or compliance determination. Records of subsequent tests shall be maintained for a minimum of five years. Records of control device vendor specifications shall be maintained until removal. Control equipment data shall include the maximum expected gas generation flow rate, the density of wells, horizontal collectors, surface collectors, or other gas extraction devices.
- i. Except as provided in §62.16724(d)(2), the Permittee shall keep up-to-date, readily accessible continuous records of the equipment operating parameters specified in §61.16722 as well as up-to-date, readily accessible records for periods of operation during which the parameter boundaries established during the most recent performance test are exceeded.
- j. Except as provided in §62.16724(d)(2), the Permittee shall keep for the life of the control system an up-to-date, readily accessible plot map showing each existing and planned collector in the system and providing a unique identification location label for each collector that matches the labeling on the plot map.
- k. Except as provided in §62.16724(d)(2), the Permittee shall keep up-to-date, readily accessible records of the installation date and location of all newly installed collectors. Documentation shall be kept of the nature, date of deposition, amount, and location of asbestos-containing or non-degradable waste excluded from collection as well as any nonproductive areas excluded from production.
- 1. Except as provided in §62.16724(d)(2), the Permittee shall keep for at least five years up-to-date, readily accessible records of the following:
 - i. All collection and control system exceedances of the operational standards in § 62.16716, the reading in the subsequent month whether or not the second reading is an exceedance, and the location of each exceedance.
 - ii. Records of each wellhead temperature monitoring value of 55 degrees Celsius (131 degrees Fahrenheit) or above, each wellhead nitrogen level at or above 20 percent, and each wellhead oxygen level at or above 5 percent.
 - iii. For any root cause analysis for which corrective actions are required in §62.16720(a)(3) or

Permit No. 11-542-21 Page 8 of 25

- §62.16720(a)(4), keep a record of the root cause analysis conducted, including a description of the recommended corrective action(s) taken, and the date(s) the corrective action(s) were completed
- iv. For any root cause analysis for which corrective actions are required in §62.16720(a)(3)(ii) or §62.16720(a)(4)(ii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.
- v. For any root cause analysis for which corrective actions are required in §62.16720(a)(3)(iii) or §62.16720(a)(4)(iii), keep a record of the root cause analysis conducted, the corrective action analysis, the date for corrective action(s) already completed following the positive pressure reading or high temperature reading, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates, and a copy of any comments or final approval on the corrective action analysis or schedule from the Agency.

Reporting [40 CFR Part 62 Subpart OOO]

- m. The facility shall submit an NMOC emission rate report annually by February 1 of each year, following the procedure specified in Section 2.1 A.4.d except as provided in the paragraphs below:
 - i. If the estimated NMOC emission rate is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Agency. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the DAQ. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.
 - ii. The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. The Agency may request such additional information as may be necessary to verify the reported NMOC emission rate.
 - iii. The Permittee is exempted from the requirements of paragraphs m.i. and ii. of this section, after the installation of a collection and control system in compliance with §62.16714(b) and (c), during such time as the collection and control system is in operation and in compliance with §862.16716 and 62.16720.
- n. When the estimated NMOC emission rate is greater than 34 megagrams per year and the facility is using an active collection system designed in accordance with §62.16714(b) must submit to the Agency an annual report of the recorded information in the paragraphs below. The initial annual report must be submitted within 180 days of installation and startup of the collection and control system:
 - i. Value and length of time for exceedance of applicable parameters monitored under §62.16722(a)(1), (b), (c), (d), and (g).
 - ii. Description and duration of all periods when the landfill gas stream is diverted from the control device through a bypass line or the indication of bypass flow as specified in §62.16722;
 - iii. Description and duration of all periods when the control device was not operating for a period exceeding one hour and length of time the control device was not operating.
 - iv. All periods when the collection system was not operating.
 - v. The location of each exceedance of the 500 parts per million methane concentration as provided in §62.16716(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month. For location, you must determine the latitude and longitude coordinates using an instrument with an accuracy of at least 4 meters. The coordinates must be in decimal degrees with at least five decimal places.
 - vi. The date of installation and the location of each well or collection system expansion added pursuant to §62.16720(a)(3), (4), (b), and (c)(4).
 - vii. For any corrective action analysis for which corrective actions are required in §62.16720(a)(3) or (4) and that take more than 60 days to correct the exceedance, the root cause analysis conducted, including a description of the recommended corrective action(s), the date for corrective action(s) already completed following the positive pressure or elevated temperature reading, and, for

Permit No. 11-542-21 Page 9 of 25

action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

o. The Permittee shall submit a summary report of monitoring and recordkeeping activities by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

2. WNCRAQA CODE 4.1110 - National Emission Standards for Hazardous Air Pollutants

Applicability [WNCRAQA Code 4.1110 and 40 CFR Part 61 Subpart M]

- a. The Permittee shall comply with all applicable provisions, including the notification, testing, recordkeeping, and monitoring requirements contained in WNCRAQA Code 4.1110 "National Emission Standards for Hazardous Pollutants" as promulgated in 40 CFR Part 61, Subpart M "National Emission Standard for Asbestos", including Subpart A "General Provisions."
- b. The Permittee is subject to this provision if the source is considered an active waste disposal site. The site is considered active if asbestos-containing waste material has been deposited within the past year.

Testing [WNCRAQA Code 17.0508(f)]

c. If emission testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing are above the applicable limits in 40 CFR 61.154, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1110.

Monitoring/Recordkeeping [WNCRAQA Code 17.0508(f) and 40 CFR 61.154]

- d. The Permittee shall comply with at least one of the following:
 - i. Ensure that there are no visible emissions from any active waste disposal site; OR
 - ii. Use an alternative emissions control method that has received prior written approval by the Agency according to the procedures described in §61.149(c)(2); OR
 - iii. At the end of each operating day (or at least once every 24-hour period while the site is in continuous operation), the asbestos-containing waste material that has been deposited at the site during the operating day or previous 24-hour period shall:
 - A. Be covered with at least 15 centimeters (6 inches) of compacted nonasbestos-containing material; OR
 - B. Be covered with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion. Such an agent shall be used in the manner and frequency recommended for the particular dust by the dust suppression agent manufacturer to achieve and maintain dust control. Other equally effective dust suppression agents may be used upon prior approval by the Administrator. For purposes of this paragraph, any used, spent, or other waste oil is not considered a dust suppression agent.
- e. If the Permittee uses an option other than Paragraph d.iii, above, the Permittee shall install signs and barriers that meet the requirements of §61.154(b).
- f. For all asbestos-containing waste material received, the Permittee shall:
 - i. Maintain waste shipment records, using a form similar to that shown in Figure 4 of Subpart M, and include the following information:
 - A. The name, address, and telephone number of the waste generator.
 - B. The name, address, and telephone number of the transporter(s).
 - C. The quantity of the asbestos-containing waste material in cubic meters (cubic yards).
 - D. The presence of improperly enclosed or uncovered waste, or any asbestos-containing waste material not sealed in leak-tight containers. Report in writing to the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the disposal site, by the following working day, the presence of a significant amount of improperly enclosed or uncovered waste. Submit a copy of the waste shipment record along with the report.
 - E. The date of the receipt.
 - ii. As soon as possible and no longer than 30 days after receipt of the waste, send a copy of the

- signed waste shipment record to the waste generator.
- iii. Upon discovering a discrepancy between the quantity of waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. If the discrepancy is not resolved within 15 days after receiving the waste, immediately report in writing to the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the waste generator (identified in the waste shipment record), and, if different, the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program for the disposal site. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report.
- iv. Retain a copy of all records and reports required by this paragraph for at least 2 years.
- g. The Permittee shall maintain records of the location, depth and area and quantity in cubic meters (or cubic yards) of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area until closure of the landfill.
- h. Upon closure, the Permittee shall:
 - i. Comply with all the provisions of §61.151; AND
 - ii. Submit a copy of records of asbestos waste disposal locations and quantities.

If the Permittee does not comply with the monitoring and recordkeeping requirements in Paragraphs d. through h., above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.1110.

3. WNCRAQA CODE 4.0516 - Sulfur Dioxide Emissions From Combustion Sources

Emission Limitation(s)/Standard(s) [WNCRAQA Code 4.0516]

a. Emissions of sulfur dioxide from the candlestick-type flare (CD-1) while firing landfill gas shall not exceed 2.3 pounds per million BTU heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [WNCRAQA Code 4.2611]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in the General Conditions in Section 2 of the permit. If the results of this test are above the limitation(s) given in Section 2.1.A.3.a, above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0516.

Monitoring, Recordkeeping and Reporting [WNCRAQA Code 17.0508(f)]

c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the candlestick-type flare while firing landfill gas or propane as an igniter fuel.

4. WNCRAQA Code 4.0521 – Control of Visible Emissions

Emission Limitation(s)/Standard(s) [WNCRAQA Code 4.0521]

a. Visible emissions shall not be more than 20 percent opacity (six-minute average) for the candlestick-type flare (CD-1) while firing landfill gas. However, six-minute averaging periods may exceed 20 percent opacity if no six-minute period exceeds 87 percent opacity, no more than one six-minute period exceeds 20 percent opacity in any hour, and no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Testing [WNCRAQA Code 4.2610]

b. If emission testing is required, the testing shall be performed in accordance with General Condition KK located in the General Conditions of Section 2 of the permit. If the results of this test are above the limitation(s) given in Section 2.1.A.4.a, above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521

Monitoring, Recordkeeping and Reporting [WNCRAQA Code 17.0508(f)]

c. No monitoring, recordkeeping or reporting is required for visible emissions from the candlestick-type flare (CD-1) while firing landfill gas or propane as an igniter fuel.

B. Emission Source ID G-1 - One Jenbacher electrical generator set, Model JGS 420, fired by landfill gas, with a maximum rated heat input capacity of 17 MMBtu/hr (engine output capacity 1,966 HP).

The following table provides a summary of limitation(s) and standard(s) for the emission source(s) referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
NO _x , CO, VOC	Emissions of NO _x , CO, and VOC shall not exceed 2.0, 5.0, and 1.0 g/HP-hr, respectively.	WNCRAQA Code 4.0524 40 CFR Part 60 Subpart JJJJ
Hazardous Air Pollutants	NESHAP Subpart ZZZZ is related to NSPS Subpart JJJJ and compliance with Subpart ZZZZ is achieved by compliance with Subpart JJJJ.	WNCRAQA Code 4.1111 40 CFR Part 63 Subpart ZZZZ
Sulfur Dioxide	Sulfur dioxide emissions from G1 shall not exceed 2.3 pounds per million BTU heat input.	WNCRAQA Code 4.0516
Visible Emissions	Visible emissions from G1 shall not exceed 20% opacity.	WNCRAQA Code 4.0521
CO, NO _x , PM ₁₀ /PM _{2.5} , SO ₂ , VOCs, Lead, Mercury	Local Enforceable Only: Emissions limits and good combustion practices	NC GS §62-133.8 (g) State BACT

1. WNCRAQA Code 4.0524 - New Source Performance Standards

<u>Applicability, Standards, Notifications, Testing, Monitoring, Reporting and General Provisions [WNCRAQA Code 4.1111 and 40 CFR Part 63 Subpart JJJJ]</u>

a. The Permittee shall comply with all applicable provisions, including the requirements for emission standards, notification, testing, reporting, record keeping, and monitoring, contained in Chapter 4 .0524 "New Source Performance Standards (NSPS)" as promulgated in 40 CFR Part 60 Subpart JJJJ, including Subpart A "General Provisions." [Chapter 4 .0524]

Emission Limitations/Standards [WNCRAQA Code 4.0524 and 40 CFR Part 60 Subpart JJJJ]

5. The facility shall comply with the standards set forth in 40 CFR Part 60.4233(e) for spark ignition (SI) engines manufactured after July 1, 2010.

NO_x: 2.0 g/HP-hr or 150 ppmvd at 15 percent O₂ CO: 5.0 g/HP-hr or 610 ppmvd at 15 percent O₂ VOC: 1.0 g/HP-hr or 80 ppmvd at 15 percent O₂

Testing [WNCRAQA Code 4.0524 and 40 CFR Part 60 Subpart JJJJ]

- d. Since this engine (ES-G1) is not certified by the manufacturer to meet the standards in 60.4233(e), an initial performance test to demonstrate compliance with the standards is required. Subsequent performance testing is required every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
- e. When testing is required, the testing shall be performed in accordance with 40 CFR Part 60.4244 and General Condition JJ located in the General Conditions in Section 3 of the permit. If the results are above the standards given in Section 2.1.B.1.b. above, the Permittee shall be deemed in noncompliance with the standards in 40 CFR Part 60, Subpart JJJJ.

Monitoring and Recordkeeping [WNCRAQA Code 4.0524 and 40 CFR Part 60 Subpart JJJJ]

f. Since this engine (ES-G1) is not certified by the manufacturer to meet the emission standards, the

owner or operator must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions.

- g. The SI engine (ES-G1) shall meet the following recordkeeping requirements.
 - i. All notifications submitted to comply with this subpart and all documentation supporting any notification.
 - ii. Maintenance conducted on the engine.
 - iii. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
 - iv. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

Reporting [WNCRAQA Code 4.0524 and 40 CFR Part 60 Subpart JJJJ]

- h. If the SI engine is not certified by the manufacturer to meet the standards in 60.4233(e), the Permittee must submit an initial notification as required in 60.7(a)(1). The notification must include the following information:
 - i. Name and address of the owner or operator.
 - ii. The address of the affected source.
 - iii. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement.
 - iv. Emission control equipment.
 - v. Fuel used.

2. WNCRAQA Code 4.1111 – Maximum Achievable Control Technology

Emission Limitations/Standards, Testing, Monitoring, Recordkeeping, and Reporting [WNCRAQA Code 4.1111 and 40 CFR Part 63 Subpart ZZZZ]

a. Owners and operators of a new stationary reciprocating internal combustion engines (RICE) located at area sources of HAP emissions shall meet the requirements of the final Stationary Spark (SI) NSPS (40 CFR part 60, Subpart JJJJ), as appropriate. Compliance with 40 CFR Part 60, Subpart JJJJ meets the compliance requirements of 40 CFR Part 63, Subpart ZZZZ, for a new SI RICE located at an area source of HAP emissions. [40 CFR §63.6590(c)]

3. WNCRAOA CODE 4.0516 – Sulfur Dioxide Emissions From Combustion Sources

Emission Limitation(s)/Standard(s) [WNCRAQA Code 4.0516]

a. Emissions of sulfur dioxide from the generator while firing landfill gas shall not exceed 2.3 pounds per million BTU heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

Testing [WNCRAQA Code 4.2611]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in the General Conditions in Section 2 of the permit. If the results of this test are above the limitation(s) given in Section 2.1.B.3.a, above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0516.

Monitoring, Recordkeeping and Reporting [WNCRAQA Code 17.0508(f)]

c. No monitoring, recordkeeping or reporting is required for sulfur dioxide emissions from the generator while firing landfill gas.

4. WNCRAQA Code 4.0521 - Control of Visible Emissions

Emission Limitation(s)/Standard(s) [WNCRAQA Code 4.0521]

a. Visible emissions shall not be more than 20 percent opacity (six-minute average) for the generator

while firing landfill gas. However, six-minute averaging periods may exceed 20 percent opacity if no six-minute period exceeds 87 percent opacity, no more than one six-minute period exceeds 20 percent opacity in any hour, and no more than four six-minute periods exceed 20 percent opacity in any 24-hour period.

Testing [WNCRAQA Code 4.2610]

b. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in the General Conditions of Section 2 of the permit. If the results of this test are above the limitation(s) given in Section 2.1.B.4.a, above, the Permittee shall be deemed in noncompliance with WNCRAQA Code 4.0521

Monitoring, Recordkeeping and Reporting [WNCRAQA Code 17.0508(f)]

c. No monitoring, recordkeeping or reporting is required for visible emissions from the generator while firing landfill gas.

5. State BACT Analysis [NC GS §62-133.8 (g)] – LOCAL ENFORCEABLE ONLY

Applicability [NC GS §62-133.8 (g)]

a. In accordance with North Carolina General Statute §62-133.8 (g) the Permittee shall control the emissions of Carbon monoxide (CO), Nitrogen Oxides (NO_x), Particulate Matter (PM₁₀/PM_{2.5}), Sulfur Dioxide (SO₂), Mercury (Hg), Lead (Pb), and Volatile Organic Compounds (VOCs) using Best Available Control Technology (BACT).

Emission Limitation(s)/Standard(s) [NC GS §62-133.8 (g)]

- b. Carbon Monoxide shall be controlled using good combustion practices. Carbon Monoxide emissions shall not exceed the NSPS Subpart JJJJ emissions limit for carbon monoxide as listed in Section 2.1.B.1.b above.
- c. Nitrogen Oxides shall be controlled using good combustion practices. Nitrogen Oxide emissions shall not exceed the NSPS Subpart JJJJ emissions limit for nitrogen oxides as listed in Section 2.1.B.1.b above.
- d. PM₁₀/PM_{2.5} shall be controlled using good combustion practices and the burning of landfill gas in the
 engine.
- e. Sulfur Dioxide shall be controlled using good combustion practices and the burning of landfill gas in the engine.
- f. Volatile Organic Compounds shall be controlled using good combustion practices and the burning of landfill gas in the engine. Volatile Organic Compound emissions shall not exceed the NSPS Subpart JJJJ emissions limit for volatile organic compounds as listed in Section 2.1.B.1.b above.
- g. Mercury shall be controlled using good combustion practices and the burning of landfill gas in the engine.
- h. Lead shall be controlled using good combustion practices and the burning of landfill gas in the engine.

Testing [WNCRAQA Code 4.2602]

i. If emission testing is required, the testing shall be performed in accordance with General Condition JJ located in the General Conditions of Section 2 of the permit. If the results of this test are above the limitation(s) given in Section 2.1.B.5.a, above, the Permittee shall be deemed in noncompliance with GS §62-133.8(g).

Monitoring, Recordkeeping and Reporting [WNCRAQA Code 17.0508(f)]

- j. To assure compliance, the Permittee shall perform inspections and maintenance as recommended by the manufacturer. In addition to the manufacturer's inspection and maintenance recommendations, or if there is no manufacturer's inspection and maintenance recommendations, as a minimum, the inspection and maintenance requirement shall include the following:
 - i. The Permittee shall perform an annual inspection (for each 12 month period following the initial inspection) to ensure the engine is operating properly.
 - ii. The results of inspection and maintenance shall be maintained in a logbook (written or electronic

format) on-site and made available to an authorized representative upon request. The logbook shall record the following:

- A. The date and time of each recorded action.
- B. The results of each inspection.
- C. The results of any maintenance performed on the engine.
- D. Any variance from manufacturer's recommendations, and the corrections made.
- k. The Permittee shall maintain a monthly summary report of monitoring and recordkeeping listed above and shall submit the results within 30 days of a written request by the WNCRAQA.

2.2: Facility-Wide

The following table provides a summary of limitation(s) and standard(s) for the emission source(s) referenced above:

Regulated Pollutant	Limits / Standards	Applicable Regulation
Odorous Emissions	Local Only Requirement The facility shall be operated such that suitable measures shall be employed to prevent odorous emissions from causing or contributing to objectionable odors beyond the facility's boundaries.	WNCRAQA Code 4.1806

LOCALLY ENFORCEABLE ONLY

- 1. WNCRAOA CODE 4.1806 Control and Prohibition of Odorous Emissions
 - a. The facility shall be operated such that suitable measures are employed to prevent odorous emissions from causing or contributing to objectionable odors beyond the facility's boundaries.

SECTION 3 - GENERAL CONDITIONS AND LIMITATIONS

This section describes terms and conditions applicable to this Title V facility.

- A. General Provisions [NCGS 143-215 and WNCRAQA Code 17.0508(i)(16)]
 - 1. Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in WNCRAQA Code Chapters 4 and 17.
 - 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by WNCRAQA.
 - 3. This permit is not a waiver of or approval of any other permits that may be required for other aspects of the facility which are not addressed in this permit.
 - 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of local laws or rules, unless specifically authorized by an order from WNCRAOA.
 - 5. Except as identified as local-only requirements in this permit, all terms and conditions contained herein shall be enforceable by WNCRAQA, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
 - 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by WNCRAQA, unless the source is exempted by rule. WNCRAQA may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.
- B. Permit Availability [WNCRAQA Code 17.0507(k) and 17.0508 (i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of WNCRAQA upon request.

C. Severability Clause [WNCRAQA Code 17.0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

D. **Submissions** [WNCRAQA Code 17.0507(e) and 17.0508(i)(16)]

Except as otherwise specified herein, one copy of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to WNCRAQA.

E. **Duty to Comply** [WNCRAQA Code 17.0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as local-only requirements constitutes a violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

F. Circumvention - LOCAL ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

G. Permit Modifications

- 1. Administrative Permit Amendments [WNCRAQA Code 17.0514]
 - The Permittee shall submit an application for an administrative permit amendment in accordance with WNCRAQA Code 17.0514.
- 2. Transfer of Ownership or Operation [WNCRAQA Code 17.0524 and 17.0505]
 The Permittee shall submit an application for an ownership change in accordance with WNCRAQA Code 17.0524 and 17.0505.
- 3. Minor Permit Modifications [WNCRAQA Code 17.0515]

 The Permittee shall submit an application for a minor permit modification
 - The Permittee shall submit an application for a minor permit modification in accordance with WNCRAQA Code 17.0515.
- 4. Significant Permit Modifications [WNCRAQA Code 17.0516]
 - The Permittee shall submit an application for a significant permit modification in accordance with WNCRAQA Code 17.0516.
- 5. Reopening for Cause [WNCRAQA Code 17.0517]
 - The Permittee shall submit an application for reopening for cause in accordance with WNCRAQA Code 17.0517.

H. Changes Not Requiring Permit Modifications

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the WNCRAQA:

- a. Changes in the information submitted in the application;
- b. Changes that modify equipment or processes; or
- c. Changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the WNCRAQA to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

- 2. Section 502(b)(10) Changes [WNCRAQA Code 17.0523(a)]
 - a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
 - b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
 - i. The changes are not a modification under Title I of the Federal Clean Air Act;
 - ii. The changes do not cause the allowable emissions under the permit to be exceeded;
 - iii. The Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
 - iv. The Permittee shall attach the notice to the relevant permit.
 - c. The written notification shall include:
 - i. A description of the change;
 - ii. The date on which the change will occur;
 - iii. Any change in emissions; and
 - iv. Any permit term or condition that is no longer applicable as a result of the change.
 - d. Section 502(b)(10) changes shall be made in the permit the next time the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [WNCRAQA Code 17.0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. The change affects only insignificant activities and the activities remain insignificant after the change; or
- b. The change is not covered under any applicable requirement.
- 4. Emissions Trading [WNCRAQA Code 17.0523(c)]

To the extent that emissions trading is allowed under WNCRAQA Code Chapter 4, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to WNCRAQA Code 17.0523(c).

I.A. Reporting Requirements for Excess Emissions and Permit Deviations [WNCRAQA Code 4.0535(f) and 17.0508(f)(2)]

"Excess Emissions" - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Chapter 4; or by a permit condition; or that exceeds an emission limit established in a permit issued under WNCRAQA Code 17.0700. (Note: Definitions of excess emissions under 4.1110 and 4.1111 shall apply where defined by rule.)

"<u>Deviations</u>" - for the purpose of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions, as well as excess emissions as defined above lasting less than four hours.

Excess Emissions

- 1. If a source is required to report excess emissions under NSPS (WNCRAQA Code 4.0524), NESHAPs (WNCRAQA Code 4.1110 or 4.1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (WNCRAQA Code 4.0524), NESHAPs (WNCRAQA Code 4.1110 or 4.1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with WNCRAQA Code 4.0535 as follows:
 - a. Pursuant to WNCRAQA Code 4.0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
 - i. Notify the Director of any such occurrence by 9:00 a.m. Eastern Time of the Agency's next business day of becoming aware of the occurrence and provide:
 - Name and location of the facility;

- Nature and cause of the malfunction or breakdown;
- Time when the malfunction or breakdown is first observed;
- Expected duration; and
- Estimated rate of emissions;
- ii. Notify the Agency immediately when corrective measures have been accomplished; and
- iii. Submit to the Director within 15 days a written report as described in WNCRAQA Code 4.0535(f)(3);

Permit Deviations

- 3. Pursuant to WNCRAQA Code 17.0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
 - a. Notify the Director of all other deviations from permit requirements not covered under WNCRAQA Code 4.0535 quarterly. A written report to the Director shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

I.B. Other Requirements under WNCRAQA Code 4.0535

The Permittee shall comply with all other applicable requirements contained in WNCRAQA Code 4.0535, including 4.0535(c), as follows:

- 1. Any excess emissions that do not occur during startup and shutdown shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in WNCRAQA Code 4.0535(c)(1) through (7).
- 2. WNCRAQA Code 4.0535(g). Excess emissions during startup and shutdown shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

- 1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in (3) below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
 - a. An emergency occurred and the Permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
 - d. The Permittee submitted notice of the emergency to WNCRAQA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

K. Permit Renewal [WNCRAQA Code 17.0508(e) and 17.0513(b)]

This permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete renewal application is submitted at least six months before the date of permit expiration. If the Permittee or applicant has complied with WNCRAQA Code 17.0512(b)(1), this WNCRAQA Code 17.0500 permit shall not expire until the renewal permit has been

issued or denied. Permit expiration under WNCRAQA Code 17.0400 terminates the facility's right to operate unless a complete WNCRAQA Code 17.0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 2Q .0400 requirements. In either of these events, all terms and conditions of this permit shall remain in effect until the renewal permit has been issued or denied.

L. Need to Halt or Reduce Activity Not a Defense [WNCRAQA Code 17.0508(i)(4)]

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.

M. <u>Duty to Provide Information (submittal of information)</u> [WNCRAQA Code 17.0508(i)(9)]

- 1. The Permittee shall furnish to WNCRAQA, in a timely manner, any reasonable information that the Director may request in <u>writing</u> to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish WNCRAQA copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

N. **Duty to Supplement** [WNCRAQA Code 17.0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to WNCRAQA. The Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

O. Retention of Records [WNCRAQA Code 17.0508(f) and 17.0508(l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to an authorized WNCRAQA representative for inspection upon request.

P. Compliance Certification [WNCRAQA Code 17.0508(n)]

The Permittee shall submit to WNCRAQA and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street, Atlanta, GA 30303) postmarked on or before **January 30** a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. The identification of each term or condition of the permit that is the basis of the certification;
- 2. The compliance status (with the terms and conditions of the permit for the period covered by the certification);
- 3. Whether compliance was continuous or intermittent; and
- 4. The method(s) used for determining the compliance status of the source during the certification period.

Q. Certification by Responsible Official [WNCRAQA Code 17.0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

R. Permit Shield for Applicable Requirements [WNCRAQA Code 17.0512]

Permit No. 11-542-21 Page 19 of 25

- 1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
 - a. The power of the Director under WNCRAQA Code 1.0102(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
 - b. The liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
 - c. The applicable requirements under Title IV; or
 - d. The ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under WNCRAOA Code 17.0523.
- 4. A permit shield does not extend to minor permit modifications made under WNCRAQA Code 17.0515.

S. Termination, Modification, and Revocation of the Permit [WNCRAQA Code 17.0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. The information contained in the application or presented in support thereof is determined to be incorrect;
- 2. The conditions under which the permit or permit renewal was granted have changed;
- 3. Violations of conditions contained in the permit have occurred;
- 4. The EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. The Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

T. Insignificant Activities [WNCRAQA Code 17.0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized WNCRAQA representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

U. Property Rights [WNCRAQA Code 17.0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

V. Inspection and Entry [WNCRAQA Code 17.0508(1) and 1.0104(d)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow WNCRAQA, or an authorized representative, to perform the following:
 - a. Enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
 - b. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
 - c. Inspect, at reasonable times and using reasonable safety practices, any source, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
 - d. Sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of WNCRAQA who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his or her official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

W. Annual Fee Payment [WNCRAQA Code 17.0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with WNCRAQA Code 17.0200.
- 2. Payment of fees may be by check or money order made payable to the Western North Carolina Regional Air Quality Agency. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under WNCRAQA Code 17.0519.

X. Annual Emission Inventory Requirements [WNCRAQA Code 17.0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in WNCRAQA Code 17.0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such forms as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

Y. Confidential Information [WNCRAQA Code 17.0107 and 17.0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to WNCRAQA Code 17.0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with WNCRAQA Code 17.0107.

Z. Construction and Operation Permits [WNCRAQA Code 17.0100 and 17.0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source that is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of WNCRAQA Code 17.0100 and 17.0300.

AA. <u>Standard Application Form and Required Information</u> [WNCRAQA Code 17.0505 and 17.0507] The Permittee shall submit applications and required information in accordance with the provisions of WNCRAQA Code 17.0505 and 17.0507.

BB. Financial Responsibility and Compliance History [WNCRAQA Code 17.0507(d)(4)]

WNCRAQA may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [WNCRAQA Code 17.0501(e)]

- 1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82, Subpart A, Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82, Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device, except as provided in 40 CFR Part 82, Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

DD. Prevention of Accidental Releases - Section 112(r) [WNCRAQA Code 17.0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

EE. <u>Prevention of Accidental Releases "General Duty" Clause - Section 112(r)(1)</u> - FEDERALLY ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

FF. Title IV Allowances [WNCRAQA Code 17.0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

GG. Air Pollution Emergency Episode [WNCRAQA Code 4.0300]

Should the Director declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in WNCRAQA Code 4.0300.

HH. Registration of Air Pollution Sources [WNCRAQA Code 4.0202]

The Director may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with WNCRAOA Code 4.0202(b).

II. Ambient Air Quality Standards [WNCRAQA Code 4.0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in WNCRAQA Code 4.0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

- JJ. General Emissions Testing and Reporting Requirements [WNCRAQA Code 17.0508(i)(16)] Emission compliance testing shall be by the procedures of WNCRAQA Code 4.2600, except as may be otherwise required in WNCRAQA Code 4.0524, 4.0912, 4.1110, 4.1111, or 4.1415. If emissions testing is required by this permit or WNCRAQA or if the Permittee submits emissions testing to WNCRAQA to demonstrate compliance, the Permittee shall perform such testing in accordance with WNCRAQA Code 4.2600 and follow the procedures outlined below:
 - 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
 - 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
 - 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
 - 4. One copy of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
 - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
 - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
 - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
 - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
 - b. The Director may authorize the WNCRAQA to conduct independent tests of any source subject to a

rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the WNCRAQA using the appropriate testing procedures described in WNCRAQA Code 4.2600 has precedence over all other tests.

KK. Reopening for Cause [WNCRAQA Code 17.0517]

- 1. A permit shall be reopened and revised under the following circumstances:
 - a. Additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
 - b. Additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
 - c. The Director or EPA finds 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; or
 - d. The Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to WNCRAQA Code 17.0513(c).
- 3. Except for the local enforceable only portion of the permit, the procedures set out in WNCRAQA Code 17.0507, 17.0521, or 17.0522 shall be followed to reissue the permit. If the local enforceable only portion of the permit is reopened, the procedures in WNCRAQA Code 17.0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.
- 5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

LL. Reporting Requirements for Non-Operating Equipment [WNCRAQA Code 17.0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment, noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

MM. Fugitive Dust Control Requirement [WNCRAQA Code 4.0540] - LOCAL ENFORCEABLE ONLY As required by WNCRAQA Code 4.0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in WNCRAQA Code 4.0540(g).

"Fugitive dust emissions" means particulate matter that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

NN. Specific Permit Modifications [WNCRAQA Code 17.0501 and 17.0523]

- 1. For modifications made pursuant to WNCRAQA Code 17.0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to WNCRAQA Code 17.0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of WNCRAQA Code 17.0500 (except for WNCRAQA Code 17.0504) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with WNCRAQA Code 17.0523(a)(1)(C),

the Permittee shall notify the Director and EPA (EPA Region 4 - Air Planning Branch, 61 Forsyth St., Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:

- a. A description of the change at the facility;
- b. The date on which the change will occur;
- c. Any change in emissions; and
- d. Any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements

OO. Third Party Participation and EPA Review [WNCRAQA Code 17.0521, 17.0522 and 17.0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 2Q .0518 begins at the end of the 45-day EPA review period.

ATTACHMENT 1

List of Insignificant Activities

- One diesel fuel-fired Morbark tub grinder, Model 1200 (nonroad engine, 650 hp capacity)
- One storage tank with two compartments (one compartment that stores 10,000 gallons of off-road Diesel fuel, and one compartment that stores 2,000 gallons of gasoline (subject to 40 CFR Part 63 Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities)
- On diesel fuel storage tank (6,000 gallon capacity)
- One leachate pond (30,000 square feet of surface area, 1,000,000 gallon capacity)

ATTACHMENT II

LIST OF ACRONYMS

AOS Alternate Operating Scenario
BACT Best Available Control Technology

BTU British Thermal Unit

CAA Clean Air Act

CAM Compliance Assurance Monitoring
CEMS Continuous Emission Monitoring System

CFR Code of Federal Regulations

CI Compression Ignition

COMS Continuous Opacity Monitoring System

CFR Code of Federal Regulations EPA Environmental Protection Agency

FR Federal Register

GACT Generally Available Control Technology

HAP Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

NCGS North Carolina General Statutes

NESHAPs National Emission Standards for Hazardous Air Pollutants

NOx Nitrogen Oxides

NSPS New Source Performance Standard

PM Particulate Matter

PM₁₀ Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers

or Less

PM_{2.5} Particulate Matter with Nominal Aerodynamic Diameter of 2.5

Micrometers or Less

POS Primary Operating Scenario

PSD Prevention of Significant Deterioration
RICE Reciprocating Internal Combustion Engine

SIC Standard Industrial Classification

SIP State Implementation Plan

SO₂ Sulfur Dioxide SI Spark Ignition TPY Tons Per Year

VOC Volatile Organic Compound

WNCRAQA Western North Carolina Regional Air Quality Agency