COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Jeffery Steers
Regional Director

August 14, 2017

Mr. Brad Burmaster
Senior Vice President
Industrial Wholesale Power, LLC
2250 Dabney Road
Richmond, Virginia 23230

Location: Amelia County
Registration No: 31047

Dear Mr. Burmaster:

Attached is a renewal Title V permit to operate your facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

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

This approval to operate does not relieve Industrial Wholesale Power, LLC of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The Regulations, at 9VAC5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, 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 to court by filing a Notice of Appeal with:

Mr. David K. Paylor, Director
Department of Environmental Quality
P. O. Box 1105
Richmond, VA 23218

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

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

Sincerely,

Kyle Ivar Winter, P.E.
Deputy Regional Director

JEK/JH/31047-21 TVR permit
Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Director, Office of Permits and Air Toxics (3AP10), U.S. EPA, Region III (electronic file submission)
Manager/Inspector, Air Compliance

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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 9 VAC 5-80-50 through 9 VAC 5-80-300 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:	Ingenco Wholesale Power, LLC
Facility Name:	Ingenco Amelia Plant
Facility Location:	20221 Maplewood Rd, Jetersville, Virginia
Registration Number:	31047
Permit Number:	PRO31047

This permit includes the following programs:
Federally Enforceable Requirements - Clean Air Act (Pages 5 through 30)

August 14, 2017
Effective Date

August 13, 2022
Expiration Date

Deputy Regional Director

August 14, 2017
Signature Date

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Facility Information

Permittee
Ingenco Wholesale Power, LLC
2250 Dabney Rd.
Richmond, VA 23230

Responsible Official
Mr. Brad Burmaster, Senior Vice President

Facility
Ingenco Amelia Plant
20221 Maplewood Rd,
Jetersville, VA 23083

Contact Person
Mr. Matthew Weeks
Associate, Environmental Professional
Phone: (804) 521-3572

County-Plant Identification Number: 51-007-00011

Facility Description: NAICS 221117 - The facility is a 16 MW power generation facility. The facility receives treated landfill gas (LFG fuel) from the separately permitted Maplewood Landfill (Registration No. 30993) that is located adjacent to the facility. However, the Maplewood Landfill and the Ingenco Amelia plant are not considered a single stationary source under the PSD and TV regulations. The LFG fuel powers the facilities forty-eight compression ignition reciprocating internal combustion engines that are arranged in eight groups of six engines. All landfill gas consumed by the engines must be processed through the landfill gas treatment system at the Amelia plant before usage. The landfill gas treatment system is composed of de-watering, filtration, and compression processes. The engines at the Amelia plant can also fire on diesel, bio-diesel, or No. 4 oil.

Emission Units

Equipment to be operated consists of:

Reference No.	Stack Id.	Equipment Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
A1 – H6	S-1 through S-8	Forty-eight Detroit Diesel Model 6063-TK35 dual-fuel diesel engines constructed in 2004, each driving a 350 kW generator; arranged in eight groups of six engines each. Each group has a separate exhaust stack, e.g. S1 serving group A1-A6, S2 serving group B1-B6, etc.	550 HP and 3.57 MMBtu/hr heat input each; total for 48 engines, 171.36 MMBtu/hr heat input.	N/A Passive controls: air-to-fuel ratio control, turbo-charging, custom built after coolers and charge-air cooling systems, engine control modules.	–	NO_x, CO, SO_x, VOC, PM, PM-10	July 12, 2012
–	–	Landfill gas treatment and transport system components operated by the permittee	1,000-4,500 scfm	N/A	–	–	July 12, 2012
B1	9	Oil-Fired Boiler Constructed prior to 6/4/2010	0.229 MMBtu/hr	N/A	-	-	N/A

*The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements – (Emission Units A1-H6 and B1)

1. **Fuel Burning Equipment Requirements – Limitations** - Nitrogen oxides emissions from the 48 dual-fuel diesel engines (A1-H6) shall be controlled by the original equipment manufacturers air-to-fuel ratio control, turbo-charging and charge-air cooling systems or a change to the engine control module (ECM). The air-to-fuel ratio shall be controlled by a separate engine control module for each engine.
(9 VAC 5-80-110 and Condition 2 of the minor NSR permit dated July 12, 2012)

2. **Fuel Burning Equipment Requirements – Limitations** - Nitrogen oxides emissions from the 48 dual-fuel diesel engines (A1-H6) shall also be controlled by supplementary inlet charge-air water-to-air cooling and oversized inlet charge and exhaust ducts. The cooling system shall be capable of maintaining an hourly average inlet charge-air temperature not greater than 140°F. Water shall be provided continuously to each engine's inlet charge-air cooler and each engine shall have independent temperature measurement capabilities. The inlet charge-air cooler shall be provided with adequate access for inspection and shall be in operation when any of the 48 dual-fuel diesel engines (A1-H6) are operating.
(9 VAC 5-80-110 and Condition 3 of the minor NSR permit dated July 12, 2012)

3. **Fuel Burning Equipment Requirements – Limitations** - Nitrogen oxides emissions from the 48 dual-fuel diesel engines (A1-H6) shall be controlled by the combustion of treated landfill gas whenever any of the engines are operated in the dual fuel mode. The extent to which the dual fuel operations control nitrogen oxides emissions is dependent upon the heat substitution rate supplied by the treated landfill gas. To ensure a stable supply of treated landfill gas is being diverted to the facility, the facility shall install and operate a device to monitor and record the process of diverting the collected landfill gas from the landfill gas collection and control system in order to ensure that the process of diverting the landfill gas is operated in accordance with the facilities' standard operating procedures.
(9 VAC 5-80-110 and Condition 4 of the minor NSR permit dated July 12, 2012)

4. **Fuel Burning Equipment Requirements – Limitations** - Carbon monoxide emissions from the 48 dual-fuel diesel engines (A1-H6) shall be controlled by limiting the ratio of treated landfill gas heat input to total fuel heat input to <u>up to an average not to exceed 98% on an annual basis</u>. This is accomplished by setting the assumed liquid fuel flow in MMBtus to the compliment of the assumed gas flow rate in Btus. An increase in the heat input ratio to the 48 dual-fuel diesel engines (A1-H6) greater than <u>an average 98% Gas Fraction on an annual basis</u> or a change to the engine control module (ECM) may require a permit to modify and operate. The facility may, on prior approval from the Piedmont Regional Office, operate for short periods at heat input ratios greater than <u>an average 98% Gas Fraction on an annual basis</u> or a change to the engine control module (ECM) for the purposes of research and development.
(9 VAC 5-80-110 and Condition 5 of the minor NSR permit dated July 12, 2012)

5. **Fuel Burning Equipment Requirements – Limitations -** Any uncontrolled venting of landfill gas from either, the 48 dual-fuel diesel engines (A1-H6), the landfill gas treatment system, or the treated landfill gas transport system is prohibited. All treated landfill gas shall be purged from the treated landfill gas transport system prior to shutting down any engine after operating in the dual fuel mode. All atmospheric vents in the treated landfill gas transport system shall be controlled by a lockout-tag-out system or by installing and operating a device to divert the emissions from all vents to an approved landfill gas control system.
(9 VAC 5-80-110 and Condition 6 of the minor NSR permit dated July 12, 2012)

6. **Fuel Burning Equipment Requirements – Limitations -** Particulate matter and volatile organic compounds emissions from the 48 dual-fuel diesel engines (A1-H6) shall be controlled by proper engine maintenance practices. The engines shall be repaired and maintained to prevent excess emissions of particulate matter (in the form of Particulate Matter (PM) and PM-10) and volatile organic compounds.
(9 VAC 5-80-110 and Condition 7 of the minor NSR permit dated July 12, 2012)

7. **Fuel Burning Equipment Requirements – Limitations -** All components of the treated landfill gas control system, which consists of each one of the 48 dual-fuel diesel engines (A1-H6), the treated landfill gas moving system and the landfill gas treatment system, as specified in Condition 14, shall be in operation whenever the facility is operating the engines in a dual fuel mode. If any component of the landfill gas treatment system, or treated landfill gas transport system malfunctions, the treated landfill gas transport system shall be shut down and all untreated landfill gas shall be diverted to the utility flare(s). If any engine, or set of engines, malfunctions the portion of treated landfill gas shall be diverted to the remaining engines, or to the utility flare(s).
(9 VAC 5-80-110 and Condition 8 of the minor NSR permit dated July 12, 2012)

8. **Fuel Burning Equipment Requirements – Limitations -** The facility shall determine the heat value of the treated landfill gas on a weekly basis, using the following formula:

$$\text{Heat Value}\left(\frac{\text{BTU}}{\text{cf}}\right)=\left(\frac{\%\,\text{Methane}}{100}\right)\text{x}\ 992.65\,\frac{\text{BTU}}{\text{cf}}$$

A log of the values shall be maintained. The methane-measuring device shall be maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. The measuring device shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 15 of the minor NSR permit dated July 12, 2012)

9. **Fuel Burning Equipment Requirements – Limitations -** The entire landfill gas treatment system as specified in Condition 14 is required to comply with 40 CFR 60.752(b)(2)(iii)(C) and shall be installed and operational whenever landfill gas is being transferred to any of the 48 dual-fuel diesel engines (A1-H6). Verification of satisfactory operation of treatment equipment shall, at a minimum, include certification that manufacturer's written requirements or recommendations for installation, operation, and maintenance of the devices shall be followed.
(9 VAC 5-80-110 and Condition 16 of the minor NSR permit dated July 12, 2012)

10. **Fuel Burning Equipment Requirements – Limitations -** The approved fuels for the 48 dual-fuel diesel engines (A1-H6) are number 1 and number 2 distillate oil, biodiesel oil, number 4 fuel oil, and treated landfill gas. A change in the fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 17 of the minor NSR permit dated July 12, 2012)

11. **Fuel Burning Equipment Requirements – Limitations -** The facility shall limit consumption of fuel such that neither the total nitrogen oxides (NO_x) nor total carbon monoxide (CO) emissions exceed 240 tons, for any consecutive 12-month period. The emissions shall be calculated monthly as the sum of each consecutive 12-month period according to the following equations:

Given:

$$NOx = \frac{\left[\left(\frac{(A \times CV_{liq}) \times 1MMBtu}{1{,}000{,}000Btu}\right) \times ENOx(l)1lbs/MMBtu\right] + \left[\left(\frac{(B \times CV_{LFG}) \times 1MMBtu}{1{,}000{,}000Btu}\right) \times ENOx\ (LFG) \times lb/MMBtu\right]}{2000lb/ton}$$

$$CO = \frac{\left[\left(\frac{(A \times CV_{liq}) \times 1MMBtu}{1{,}000{,}000Btu}\right) \times ECOx\ (l)1lbs/MMBtu\right] + \left[\left(\frac{(B \times CV_{LFG}) \times 1MMBtu}{1{,}000{,}000Btu}\right) \times ECOx\ (LFG) \times lb/MMBtu\right]}{2000lb/ton}$$

Where:

A = gallons of liquid fuel consumed as numbers 1 and distillate oil, biodiesel oil, or number 4 residual oil.

B = cubic feet of landfill gas consumed.

CV_{liq} = calorific value (heat content) in Btu/gallon of the corresponding liquid fuel as biodiesel as specified in Condition 12 or 137,000 Btu/gallon for distillate oil or 144,000 Btu/gallon for number 4 residual oil.

CV_{LFG} = calorific value (heat content) in Btu/cubic foot of treated landfill gas as determined by Condition 8.

ENO_x (l) = Emissions factor for NO_x from liquid fuel as shown in the table below
ENO_x(lfg) = Emissions factor for NO_x from landfill gas as shown in the table below.

ECO(l) = Emissions factor for CO from liquid fuel as shown in the table below
ECO(lfg) = Emissions factor for CO from landfill gas as shown in the table below:

Emission Factors:

Landfill Gas Substitution Range (NO_x)	ENO_x(l)	ENO_x(lfg)
0%-30%	2.15	- 0.40
31%-80%	1.50	1.50
81%-96%	5.00	0.70
81%-96% (New PCM128 Units)	4.65	0.41
96%- an average ≤98% (New PCM128 Units/Injectors/cams)	4.166	0.187

Landfill Gas Substitution Range (CO)	ECO(l)	ECO(lfg)
0%-54%	0.26	5.25
55%-96%	5.60	0.80
81%-96% (New PCM128 Units)	4.35	0.54
96%- an average ≤98% (New PCM128 Units/Injectors/cams)	7.838	0.524

Such that:

$NO_x \leq 240$ tons/yr calculated as the sum of each consecutive 12-month period as a product of the heat input contribution from each fuel source.

$CO \leq 240$ tons/yr calculated as the sum of each consecutive 12-month period as a product of the heat input contribution from each fuel source.

Each equation is valid only if the total heat input contribution from treated landfill gas heat input is <u>not to exceed 98% of the total heat input on an annual average</u> dual-fuel operation, expressed as the ratio of treated landfill gas heat input to total fuel heat input (For each period of continuous dual-fuel operation), according to the following equation:

$$HI_{LFG} = \frac{B \times CV_{LFG}}{(A \times CV_{liq}) + (B \times CV_{LFG})} \times 100 \leq 98\%$$

(9 VAC 5-80-110 and Condition 18 of the minor NSR permit dated July 12, 2012)

12. **Fuel Burning Equipment Requirements – Limitations -** The liquid fuels and treated landfill gas shall meet these specifications:

Distillate oils which meet the ASTM D396 specification for numbers 1 and 2 fuel oil

Biodiesel fuel oil which meets the ASTM D6751 specifications:

Nominal Heat content: 131,000 BTU/gallon

Residual oil which meets the ASTM D396 specifications for number 4 fuel oil:

Sulfur content per shipment: 0.5%

Treated landfill gas:

Minimum heat content: 200 Btu/scf

The heat content of the treated landfill gas shall be analyzed for gross calorific value using the method outlined in Condition 8. The heat and sulfur content of each fuel listed shall be used to calculate the facility's emissions as defined by the emission factors and limits found in Conditions 10, 11, 44, and 16.
(9 VAC 5-80-110 and Condition 19 of the minor NSR permit dated July 12, 2012)

13. **Fuel Burning Equipment Requirements – Limitations** - The diesel and biodiesel fuel used by the 48 dual-fuel diesel engines (A1-H6) must meet the requirements in 40 CFR 80.510(b) for nonroad diesel fuel.
(9 VAC 5-80-110 and 40 CFR §§63.6604 (a))

14. **Fuel Burning Equipment Requirements – Limitations** - Treated landfill gas shall be that which is produced by the Maplewood Landfill (Reg. No. 30993) as that facility is permitted by the Virginia Department of Environmental Quality and has been processed in accordance with 40 CFR 60.752 (b)(2)(iii)(C). The landfill gas treatment system, at a minimum, shall be composed of a de-watering process, filtration through a 10-micron filter, and compression. The facility's de-watering process shall consist of a tertiary or polishing tank with a total capacity of 250 gallons. The primary and secondary knockout tanks are located at the Maplewood Landfill (Reg. No. 30993). All landfill gas consumed at the permitted facility shall pass through each component of the landfill gas treatment process prior to use in the combustion process.
(9 VAC 5-80-110 and Condition 20 of the minor NSR permit dated July 12, 2012)

15. **Fuel Burning Equipment Requirements – Limitations** - Emissions from the operation of any of the 48 dual-fuel diesel engines (A1-H6) when the facility is operated in either the single fuel or the dual fuel mode shall not exceed the limits specified below:

Particulate Matter	0.3	lb/MMBtu
PM-10	0.3	lb/MMBtu
PM-2.5	0.3	lb/MMBtu
Sulfur Dioxide	0.5	lb/MMBtu
Nitrogen Oxides (as NO_2)	2.4	lb/MMBtu
Carbon Monoxide	4.3	lb/MMBtu

Volatile Organic Compounds	0.4	lb/MMBtu

Compliance with the lb/MMBtu limits for PM, PM-10, NO_x, CO, and VOC shall be determined by stack testing. All other emission limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 7, 10, 11, 12 and 14.
(9 VAC 5-80-110 and Condition 22 of the minor NSR permit dated July 12, 2012)

16. **Fuel Burning Equipment Requirements – Limitations** - Visible emissions from the 48 dual-fuel diesel engines' (A1-H6) stacks (S1-S8) shall not exceed 10% opacity whenever the engines are operated in a single fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity. Visible emissions from the 48 dual-fuel diesel engines' (A1-H6) stacks (S1-S8) shall not exceed 20% opacity whenever the engines are operated in a dual fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity. All visible emissions rates shall be determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110 and Condition 24 of the minor NSR permit dated July 12, 2012)

17. **Fuel Burning Equipment Requirements – Limitations** - As stated in the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE MACT, Subpart ZZZZ), the facility shall, as a minimum, change the oil and oil filter every 1,440 hours of operation or annually, whichever comes first, for each engine. The facility shall also inspect all hoses and belts every 1,400 hours of operation or annually, whichever comes first, and replace as necessary. The facility shall minimize the engines' time spent at idle during startup and minimize the engines' startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
(9 VAC 5-80-110, 40 CFR §§63.6625 (h), 40 CFR §§63.6603 (a) and Table 2d (13) of 40 CFR 63 Subpart ZZZZ)

18. **Fuel Burning Equipment Requirements – Limitations** - The facility shall combust treated landfill gas from the Maplewood Landfill (Reg. No. 30993) in the 48 dual-fuel diesel engines' (A1-H6) in an amount which is equivalent to 10 percent or more of the gross heat input on an annual basis.
(9 VAC 5-80-110.M)

19. **Fuel Burning Equipment Requirements – Federal Requirements** - The boiler (B1) is subject to MACT JJJJJJ -National Emissions Standards for Hazardous Air Pollutants for Industrial, Commercial, and Industrial Boiler Area Sources. The boiler is considered an existing oil-fired boiler as defined in 40 CFR 63.11194, 40 CFR 63.11200, and 40 CFR 63.11237. The requirements are as follows:

Citation	Requirement
40CFR63.11201(b) and Table 2	Work practice standard, emission reduction measures and management practice requirements
40CFR63.11205	General compliance requirements
40CFR63.11210-40CFR63.11214	Initial compliance requirements
40CFR63.11223(a) and (e)	Continuous compliance requirements
40CFR63.11225	Reporting requirements
40CFR63.11225(c) and (d)	Recordkeeping requirements

(9 VAC 5-80-110 and 40 CFR 63 Subpart JJJJJJ)

20. **Fuel Burning Equipment Requirements – Federal Requirements -** Visible Emissions from the boiler (B1) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, App. A).
(9 VAC 5-80-110 and 9 VAC 5-50-80)

21. **Fuel Burning Equipment Requirements – Monitoring -** The facility shall be equipped with devices to continuously measure and record treated landfill gas consumption, numbers 1 and 2 distillate oil, biodiesel oil, and number 4 fuel oil consumption by the 48 dual-fuel diesel engines (A1-H6). Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, at a minimum, the manufacturer's written requirements or recommendations. Each device shall be provided with adequate access for inspection and shall be in operation when the facility is operating.
(9 VAC 5-80-110 and Condition 9 of the minor NSR permit dated July 12, 2012)

22. **Fuel Burning Equipment Requirements – Monitoring -** Each of the dual-fuel diesel engines (A1-H6) shall be equipped with a device to continuously measure engine inlet charge-air temperature. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, at a minimum, the manufacturer's written requirements or recommendations. Each device shall be provided with adequate access for inspection and shall be in operation when the engine is operating.
(9 VAC 5-80-110 and Condition 10 of the minor NSR permit dated July 12, 2012)

23. **Fuel Burning Equipment Requirements – Monitoring -** The facility shall be equipped with a device to continuously measure the pressure within the treated landfill gas transport system. At a minimum, the devices shall be located, just before and just after, the 10-micron filter and after the completed treatment process. Each device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, at a minimum, the manufacturer's written requirements or recommendations. Each device shall be

provided with adequate access for inspection and shall be in operation whenever the engines are operating.
(9 VAC 5-80-110 and Condition 11 of the minor NSR permit dated July 12, 2012)

24. **Fuel Burning Equipment Requirements – Monitoring -** The facility shall log observations of landfill gas fraction and inlet charge air temperature for each of the dual-fuel diesel engines (A1-H6) when operating (engines noted as "OFF" when not running). The log shall contain a minimum of hourly observations processed monthly and stored onsite. The facility will maintain a written log, stored onsite, containing hourly observations for the periods of electronic/computer problems/failure to commence within one hour of an electronic records problem/computer failure. The log shall be used for emissions calculations during periods where some or all electronic data are not available. In the case where no electronic information or manual records are available, the facility will calculate emissions using worst case scenario.
(9 VAC 5-80-110 and Condition 12 of the minor NSR permit dated July 12, 2012)

25. **Fuel Burning Equipment Requirements – Monitoring -** The monitoring devices used to measure inlet charge-air temperature shall be observed by the facility with a frequency of not less than once per hour whenever the dual-fuel diesel engines (A1-H6) are operating. The facility shall keep a log of the temperature observations of the devices and the time the observation was recorded.
(9 VAC 5-80-110 and Condition 13 of the minor NSR permit dated July 12, 2012)

26. **Fuel Burning Equipment Requirements – Monitoring -** The devices used to measure the pressure in the treated landfill gas system shall be observed by the facility whenever treated landfill gas is combusted in the dual-fuel diesel engines (A1-H6) with a frequency of not less than once per day to ensure good performance of the treatment system. The facility shall keep a daily-log of the observations of the devices, to include the change in pressure across the 10-micron filter.
(9 VAC 5-80-110 and Condition 14 of the minor NSR permit dated July 12, 2012)

27. **Fuel Burning Equipment Requirements – Monitoring -** The facility shall drain the polishing tank referenced in Condition 14 at least once each day that landfill gas is consumed by the facility, and observe the presence or absence of any water collected in the tank. The facility shall maintain a daily log of these observations, which shall include the date and time of each observation.
(9 VAC 5-80-110 and Condition 31 of the minor NSR permit dated July 12, 2012)

28. **Fuel Burning Equipment Requirements – Monitoring** - Once per month, the permittee shall conduct an observation of the presence of visible emissions from the operating 48 internal combustion engines (A1-H6). If visible emissions are observed, the permittee shall take timely corrective action such that the units resume operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from any of the 48 internal combustion engines (A1-H6) does not exceed 10% opacity whenever the engines are operated in a single fuel mode,

except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity and visible emissions from the 48 dual-fuel diesel engines (A1-H6) stacks (S1-S8) shall not exceed 20% opacity whenever the engines are operated in a dual fuel mode except during one six-minute period in any one hour in which visible emissions shall not exceed 30.0% opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceeds 10% opacity, the VEE shall be conducted for sixty minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the operating engines resumes operation that is in compliance with the opacity limit for single or dual fuel mode as appropriate. The permittee shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, single or dual fuel operations, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the 48 internal combustion engines (A1-H6) to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.
(9 VAC 5-80-110 and Condition 34 of the minor NSR permit dated July 12, 2012)

29. **Fuel Burning Equipment Requirements – Monitoring** - Once per month, the permittee shall conduct an observation of the presence of visible emissions from the operating boiler (B1). If visible emissions are observed, the permittee shall take timely corrective action such that the unit resumes operation with no visible emissions, or perform a visible emissions evaluation (VEE) in accordance with 40 CFR 60, Appendix A, Method 9 to assure visible emissions from the boiler does not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30.0% opacity. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceeds 20% opacity, the VEE shall be conducted for sixty minutes. If compliance is not demonstrated by the VEE, timely corrective action shall be taken such that the operating boiler resumes operation that is in compliance with the opacity limit. The facility shall maintain an observation log to demonstrate compliance. The log shall include the date and time of the observation, whether or not there were visible emissions, any VEE recordings and necessary corrective actions. Upon request by the Department, the permittee shall conduct additional visible emission evaluations from the boiler to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Piedmont Region.
(9 VAC 5-80-110)

30. **Fuel Burning Equipment Requirements – Recordkeeping** - The facility shall obtain a certification from the fuel supplier with each shipment of numbers 1 and 2 distillate oil, biodiesel fuel, or number 4 residual oil. Each fuel supplier certification shall include the following:

    a. The name of the fuel supplier;

    b. The date on which the fuel oil was received;

c. The volume of the fuel oil delivered in the shipment;

d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications D396 for numbers 1 or 2 fuel oil or statement that the residual oil complies with the American Society for Testing and Materials specifications D396 for numbers 4, 5, or 6 fuel oil, *or* a statement that the biodiesel oil complies with the American Society for Testing and Materials specifications ASTM D6751;

e. The heat value (in Btu/gal) of the biodiesel fuel oil; and

f. A statement that the sulfur content of the fuel oil does not exceed by weight, the maximum sulfur content that is specified for each fuel oil in Condition 12. Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by the Department may be used to determine compliance with the fuel specifications stipulated in Condition 12. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110 and Condition 21 of the minor NSR permit dated July 12, 2012)

31. **Fuel Burning Equipment Requirements – Recordkeeping -** The facility shall maintain records of all emissions data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

a. Annual consumption of landfill gas, numbers 1 and 2 distillate oil, biodiesel oil, and number 4 fuel residual oil, calculated monthly as the sum of each consecutive 12-month period;

b. Daily records of fuel consumption for every period of operation to verify compliance with Condition numbers 4, 19, 24, and 11;

c. Daily records of treated landfill gas heat input as the ratio of total heat input for every period of continuous operation to verify compliance with Conditions 4 and 11. Heat input calculations shall be based on the data required by Condition 24;

d. Daily log of the polishing tank observation results as described in Condition 38;

e. Hourly records of engine inlet charge-air temperature reading to verify compliance with Condition 2;

f. All 1 hour periods of operation during which the charge-air temperature as described in Condition 2 exceeds the average charge-air temperature limit of 140° F;

g. Monthly and annual emissions (in tons) using calculation methods approved by the Piedmont Regional Office to verify compliance with emission limitations in Conditions

11, 15 and 44. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period;

h. Treated landfill gas transport system pressure readings to verify compliance with Condition 26;
i. Weekly landfill gas gross calorific value determination results, including % methane readings as described in Condition 8;

j. Results of all stack tests, visible emissions evaluations (VEE), monthly visible emissions evaluations log, and performance evaluations;

k. All fuel supplier certifications;

l. Scheduled and unscheduled maintenance on the engines;

m. Operating procedures and operator training records for the engines;

n. All records generated by the device installed for the purpose of continuously monitoring and recording the status of the device used to divert the collected landfill gas from a utility flare to the landfill gas treatment system and then to the engines (A1-H6), as required by Condition 3;

o. Calculations demonstrating compliance with Condition 18.

p. Any problems or errors suspected with the fuel meters and any corrective action taken.

q. The results of the monthly visible emission surveys as detailed and required by Condition 29 and details of any corrective action(s) taken as a result of these inspections.

These records shall be available on site for inspection by the Department and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 25 of the minor NSR permit dated July 12, 2012)

32. **Fuel Burning Equipment Requirements – Recordkeeping -** The facility shall maintain all records as applicable to the 48 dual-fuel diesel engines (A1-H6) which include the following:

a. A copy of each notification and report submitted to comply with this subpart, including all submitted documentation supporting any Initial Notification or Notification of Compliance Status, according to the requirement in §63.10(b)(2)(xiv).

b. Records of the occurrence and duration of each malfunction of operation (*i.e.,* process equipment) or the air pollution control and monitoring equipment.

c. Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).

d. Records of all required maintenance performed on the air pollution control and monitoring equipment.

e. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

f. Records demonstrating compliance with the work and management practices required in Condition 17 according to the methods specified in Table 6 (9.a.ii) of 40 CFR 63 Subpart ZZZZ.

g. A copy of a site specific maintenance and operation plan for the engines that is consistent with good air pollution control for minimizing emissions in accordance with Table 6 (9.a.ii) of 40 CFR 63 Subpart ZZZZ.

(9 VAC 5-80-110, §63.6640(a), §63.6655(a), and §63.6655(e)(3))

33. **Fuel Burning Equipment Requirements – Testing -** Performance tests shall be conducted for NO_x and CO emissions from the 48 dual-fuel diesel engines (A1-H6) to determine compliance with the emission limits contained in Conditions 11, 15 and 44. The tests shall be performed while operating in single fuel mode using 100% distillate oil. The tests shall be performed at no less than 80% of the rated capacity of the electrical output on a minimum of one set of six engines. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110 and Condition 26 of the minor NSR permit dated July 12, 2012)

34. **Fuel Burning Equipment Requirements – Testing -**Performance tests shall be conducted for NO_x, CO, VOC, and PM-10 emissions from the 48 dual-fuel diesel engines (A1-H6) to determine compliance with the emission limits contained in Conditions 11, 15 and 44. The tests shall be performed while operating in dual fuel mode using distillate oil and the maximum landfill gas substitution rate achieved during testing. The dual fuel tests shall be performed at no less than 65% of the rated capacity of the electrical output on a minimum of one set of six engines at two points between 70% and 98% gas fraction on a Btu basis with one point within 4% of the 98% end point. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region

within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 27 of the minor NSR permit dated July 12, 2012)

35. **Fuel Burning Equipment Requirements – Testing** -Performance test shall be conducted for NO_x and CO emissions from the 48 dual-fuel diesel engines (A1-H6), within 60 days of the Piedmont Regional Office receiving notice of the combustion of number 4 fuel oil, and/or biodiesel, to determine compliance with the emission limits contained in Conditions 11, 15 and 44. Separate tests shall be performed while operating in single fuel mode using 100% number 4 fuel oil, and/or biodiesel and in dual fuel mode using various quantities of landfill gas and number 4 fuel oil, and/or biodiesel. The number 4 fuel oil, and/or biodiesel test shall be performed at no less than 80% of the rated capacity of the electrical output on a minimum of one set of six engines. The dual fuel tests shall be performed at no less than 65% of the rated capacity of the electrical output on a minimum of one set of six engines at two points between 70% and 98% gas fraction on a Btu basis with one point within 4% of the 98% end point. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 28 of the minor NSR permit dated July 12, 2012)

36. **Fuel Burning Equipment Requirements – Testing** - Concurrently with the performance test as required in Conditions 33, 34, and 35, the permittee shall determine the moisture content of the treated landfill gas, as sampled, prior to combustion in any of the 48 dual-fuel diesel engines (A1-H6). The moisture content testing shall be conducted in accordance with 40 CFR Part 60, Appendix A, Method 4. Each test shall be reported and data reduced as set forth in 9 VAC 5-50-30. The details of the test are to be arranged with the Piedmont Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Piedmont Regional Office within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 29 of the minor NSR permit dated July 12, 2012)

37. **Fuel Burning Equipment Requirements – Testing** -Concurrently with the subsequent performance tests required in Conditions 33, 34 and 35, Visible Emission Evaluations (VEE) in accordance with 40 CFR Part 60, Appendix A, Method 9, shall also be conducted by the facility on those engines tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the tests are to be arranged with the Director, Piedmont Region. The facility shall submit a test protocol at least 30 days prior to testing. Should conditions prevent concurrent opacity observations, the Director, Piedmont Region shall be notified in writing, within seven days, and visible emissions testing shall be rescheduled within 30 days. Rescheduled testing shall be conducted under the same conditions (as possible) as the initial performance tests. Two copies of the test result shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110 and Condition 30 of the minor NSR permit dated July 12, 2012)

38. **Fuel Burning Equipment Requirements – Testing** -The performance tests for NO_x and CO required in Conditions 34 and 35 shall at a minimum be conducted once every five years on all eight stacks and before the Title V operating permit renewal application submittal. Each testing cycle shall evaluate the performance of a different set of six engines (stack) to ensure the accuracy of the equations in Condition 11. Separate tests shall be performed while operating in single fuel mode using 100% liquid fuel and in dual fuel mode using various quantities of landfill gas and liquid fuel. The single fuel oil test shall be performed at no less than 80% of the rated capacity of the electrical output on a minimum of one set of six engines. The dual fuel tests shall be performed at no less than 65% of the rated capacity of the electrical output on a minimum of one set of six engines at two points between 70% and 98% gas fraction on a Btu basis with one point within 4% of the 98% end point. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30. The details of the tests are to be arranged with the Director, Piedmont Region. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Piedmont Region within 60 days after test completion and shall conform to the test report format enclosed with this permit.
(9 VAC 5-80-110 and Condition 32 of the minor NSR permit dated July 12, 2012)

39. **Fuel Burning Equipment Requirements – Testing** -The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the facility such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing stack or duct that is free from cyclonic flow. Test ports shall be provided when requested at the appropriate locations.
(9 VAC 5-80-110 and Condition 33 of the minor NSR permit dated July 12, 2012)

40. **Fuel Burning Equipment Requirements – Reporting** -The permittee shall furnish written notification to the Director, Piedmont Regional Office of:

    a. The actual date on which modification or a change to the engine control module (ECM) of the 48 dual-fuel diesel engines (A1-H6) or six pack or single engine commenced within 30 days after such date. The projected information for items b. and d. may be included in the letter for item a.

    b. The anticipated start-up date of the modification or a change to the engine control module (ECM) of the 48 dual-fuel diesel engines (A1-H6) or six pack or single engine postmarked not more than 60 days or less than 30 days prior to such date.

    c. The actual start-up date of the modification or a change to the engine control module (ECM) of the 48 dual-fuel diesel engines (A1-H6) or six-pack or single engine within 15 days after such date.

d. The anticipated date of the modification or a change to the engine control module (ECM) of the 48 dual-fuel diesel engines (A1-H6) or six pack or single engine combusting treated landfill gas postmarked not more than 60 days or less than 30 days prior to such date.

e. The actual date of the modification or a change to the engine control module (ECM) of the 48 dual-fuel diesel engines (A1-H6) initially combusting treated landfill gas, postmarked within 15 days after such date.
The information for items c. and any changes to item b. may be included in the letter for item e. This will allow for the required reports to be completed using two letters instead of five.

(9 VAC 5-80-110 and Condition 35 of the minor NSR permit dated July 12, 2012)

41. **Fuel Burning Equipment Requirements – Reporting** -The facility shall furnish notification to the Director, Piedmont Region of the date of removal or cessation of operation of the control equipment 30 days prior to such date.
(9 VAC 5-80-110 and Condition 36 of the minor NSR permit dated July 12, 2012)

42. **Fuel Burning Equipment Requirements – Reporting** -The facility shall report each instance that a requirement in Table 2d of 40 CFR 63 Subpart ZZZZ was not met.
(9 VAC 5-80-110 and 40 CFR §§63.6640 (b))

43. **Fuel Burning Equipment Requirements – Reporting** - The facility shall submit an annual report to the EPA Region III Office and to the Director, Piedmont Regional Office meeting the following requirements: Facility engines which combust landfill gas equivalent to 10 percent or more of the gross heat input on an annual basis shall report the fuel flow rate of each fuel and the heating values that were used in facilities' annual calculations, and must demonstrate that the percentage of heat input provided by landfill gas, is equivalent to 10 percent or more of the gross heat input on an annual basis; and the operating limits provided in this permit, and any deviations from these limits; and any problems or errors suspected with the meters. This report may be submitted at the same time as the Annual Compliance Certification submittal required in Condition 58 and be based upon the same time period as the certification.
(9 VAC 5-80-110.M)

Facility Wide Conditions

44. **Facility Wide Conditions – Limitations** - Total emissions from the facility, whether it is operated in the single fuel or the dual fuel mode, shall not exceed the limits specified below, calculated monthly as the sum of each consecutive 12-month period:

Particulate Matter	51.4	lb/hour	72.6	tons/year
PM-10	51.4	lb/hour	72.6	tons/year

PM-2.5	51.4	lb/hour	72.6	tons/year
Sulfur Dioxide	86.5	lb/hour	30.1	tons/year
Nitrogen Oxides (as NO_2)	411.3	lb/hour	240.0	tons/year
Carbon Monoxide	1045.3	lb/hour	240.0	tons/year
Volatile Organic Compounds	68.5	lb/hour	96.8	tons/year

Emissions limits are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition numbers 1 through 7, 10, 11, 12 and 14.
(9 VAC 5-80-110 and Condition 23 of the minor NSR permit dated July 12, 2012)

45. **Facility Wide Conditions – Limitations -** 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.
    (9 VAC 5-80-110 and Condition 40 of the minor NSR permit dated July 12, 2012)

Insignificant Emission Units

46. **Insignificant Emission Units** - The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
T-1	Fuel oil storage tank	5-80-720 B.	VOC	21,000 gallons
T-2	Fuel oil storage tank	5-80-720 B.	VOC	21,000 gallons
T-3	Fuel oil storage tank	5-80-720 B.	VOC	21,000 gallons
T-4	Fuel oil storage tank	5-80-720 B.	VOC	21,000 gallons
T-5	Lubricating oil storage tank	5-80-720 B.	VOC	1,000 gallons
T-6	Lubricating oil storage tank	5-80-720 B.	VOC	1,000 gallons
T-7	Heating oil tank	5-80-720 B.	VOC	275 gallons

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 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

47. **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
40 CFR Part 60 Subpart WWW	Standards of Performance for Municipal Solid Waste Landfills	The facility is not applicable because it is not a municipal solid waste landfill.

Citation	Title of Citation	Description of Applicability
40 CFR Part 98	Mandatory Reporting of Greenhouse Gases	The facility is not applicable because the facility CO2e emissions are less than 25,000 metric tons.

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 the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

General Conditions

48. **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.
(9 VAC 5-80-110)

49. **General Conditions – Permit Expiration** - 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 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

50. **General Conditions – Permit Expiration** - 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.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

51. **General Conditions – Permit Expiration** - If an applicant submits a timely and complete application for an initial permit or renewal under this section, 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 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
(9 VAC 5-80-80 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

52. **General Conditions – Permit Expiration** - No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.

(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

53. **General Conditions – Permit Expiration -** If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board 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 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

54. **General Conditions – Permit Expiration -** The protection under subsections F.1 and F.5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80.D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
(9 VAC 5-80-80, 9 VAC 5-80-110 and 9 VAC 5-80-170)

55. **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.

    f. The operating conditions existing at the time of sampling or measurement.

    (9 VAC 5-80-110)

56. **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.
(9 VAC 5-80-110)

57. **General Conditions – Recordkeeping and Reporting -** The permittee shall submit the results of monitoring contained in any applicable requirement to the Department no later than

March 1 and **September 1** of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 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.

b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:

(1) Exceedance of emissions limitations or operational restrictions;

(2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or Compliance Assurance Monitoring (CAM) which indicates an exceedance of emission limitations or operational restrictions; or,

(3) 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 semi-annual reporting period."

(9 VAC 5-80-110)

58. **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 EPA and the Department 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 9 VAC 5-80-80 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 9 VAC 5-80-110 E, 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.

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

R3_APD_Permits@epa.gov

(9 VAC 5-80-110)

59. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, 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. [Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40.] The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition 57 of this permit.
(9 VAC 5-80-110 F.2)

60. **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 Director, Piedmont Regional Office such failure or malfunction and within 14 days provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9VAC5-40-50 C and 9VAC5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9VAC5-40-40 and 9VAC5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.
(9 VAC 5-80-110 and 9 VAC 5-20-180)

61. **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.
(9 VAC 5-80-110)

62. **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.
(9 VAC 5-80-110)

63. **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.
(9 VAC 5-80-110)

64. **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 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1605, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-110, 9 VAC 5-80-190 and 9 VAC 5-80-260)

65. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110)

66. **General Conditions - Duty to Submit Information** - The permittee shall furnish to the Board, within a reasonable time, any information that the Board 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 Board 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 Board along with a claim of confidentiality.
(9 VAC 5-80-110)

67. **General Conditions - Duty to Submit Information** - Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)

68. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee

shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110, 9 VAC 5-80-340, and 9 VAC 5-80-2340)

69. **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.

    (9 VAC 5-50-90 and 9 VAC 5-80-110)

70. **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 Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
    (9 VAC 5-50-20 E and 40 CFR §63.6605(b))

71. **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 9 VAC 5-80-140 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 9 VAC 5 Chapter 80, Article 1.
(9 VAC 5-80-110)

72. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow the Department, 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.

    (9 VAC 5-80-110)

73. **General Conditions - Reopening For Cause** - The permit shall be reopened by the Board 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 9 VAC 5-80-80 F. The conditions for reopening a permit are as follows:

    a. The permit shall be reopened if the Board 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 Board 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 Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

    (9 VAC 5-80-110)

74. **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 Department upon request.
(9 VAC 5-80-150 and9 VAC 5-80-110)

75. **General Conditions - Transfer of Permits** -No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-110 and 9 VAC 5-80-160)

76. **General Conditions - Transfer of Permits** - 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 Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-110 and 9 VAC 5-80-160)

77. **General Conditions - Transfer of Permits** -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 Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-110 and 9 VAC 5-80-160)

78. **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 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-110, 9 VAC 5-80-190 C and 9 VAC 5-80-260)

79. **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.
(9 VAC 5-80-110 and 9 VAC 5-80-80 E)

80. **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.
(9 VAC 5-80-110 and 40 CFR Part 82)

81. **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).
(9 VAC 5-60-70 and 9 VAC 5-80-110)

82. **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.
(9 VAC 5-80-110 and 40 CFR Part 68)

83. **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.
(9 VAC 5-80-110)

84. **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 case-by-case approval of each emissions trade:

    a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.

    b. The permit shield described in 9 VAC 5-80-140 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 9 VAC 5-80-50 through 9 VAC 5-80-300.

    (9 VAC 5-80-110)