COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
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Douglas W. Domenech
Secretary of Natural Resources

David K. Paylor
Director

Michael P. Murphy
Regional Director

March 23, 2012

Mr. Robert L. Greene, Ph. D.
Environmental Compliance Manager
INGENCO – Brunswick Facility
2250 Dabney Road
Richmond, Virginia 23230

Location: Brunswick County
Registration No: 52154
County-Plant: 025-0035

Dear Mr. Greene:

Attached is your Title V permit to operate your power generation facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit dated August 20, 2008.

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

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on June 17, 2008.

This amended approval to operate does not relieve Combined Heat and Power, Inc. 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 9 VAC 5-170-200, 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.

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

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

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

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

Sincerely,

Kyle Ivar Winter, P.E.
Deputy Regional Director

JEK/hll/52154TVCover Letter03232012.docx

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AT13), U.S. EPA, Region III

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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:	Mr. Charles J. Packard, President
Facility Name:	INGENCO Wholesale Power, LLC –Brunswick Plant
Facility Location:	107 Mallard Crossing Road Lawrenceville, VA 23868

Registration Number: 52154
Permit Number: PRO-52154

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Sections I through VII)
State Only Enforceable Requirements (Section VIII)

March 23, 2012
Effective Date
March 22, 2017
Expiration Date

_____
Deputy Regional Director

March 23, 2012
Signature Date

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I. Facility Information

Permittee
INGENCO Wholesale Power, LLC
Brunswick Plant
2250 Dabney Rd.
Richmond, VA 23230

Facility
INGENCO Wholesale Power, LLC
Brunswick Plant
107 Mallard Crossing Road
Lawrenceville, VA 23868

Responsible Official
Mr. Charles J. Packard
President

Contact Person
Mr. Robert L. Greene, PhD
Environmental Compliance Manager
Phone: (804) 521-3557
Fax: (804) 521-3583
E-mail: rgreene@ingenco.com

County-Plant Identification Number: 51-025-0035

Facility Description
NAICS ID# 221119 - Other Electrical Power Generation
SIC Code: 4931-Electrical Power Generation

The facility is a 16.8 MW power generation facility. INGENCO Wholesale Power, LLC (INGENCO) Brunswick Plant is one of several facilities in the region operated by INGENCO Distributed Energy. Each INGENCO facility is adjacent to a separately permitted Municipal Solid Waste (MSW) landfill that provides treated landfill gas as fuel. The Brunswick Plant receives its landfill gas from the Brunswick Waste Management Facility, LLC (Registration No. 31007) which powers forty-eight compression ignition reciprocating internal combustion engines arranged in eight groups of six engines. The Brunswick Plant can also burn number 1 or number 2 distillate oil and bio-diesel. The facility is located in an area in attainment for all pollutants at the time of public notice. The facility is a major source for NO_x and CO emissions. The source's permitted emissions for all pollutants are below Prevention of Significant Deterioration (PSD) applicability levels. The facility is currently permitted under the following permits: A State Major New Source Review (NSR) permit issued on August 20, 2008. This permit action

pertains to the initial issuance of the Title V Operating Permit. An application for an initial Title V permit was received on June 9, 2008 by the Virginia Department of Environmental Quality (the Department) and was deemed administratively complete on July 3, 2008.

II. Emission Unit and Control Device Identification

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
A1-H6	S-1 through S-8	Forty-eight (48) 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, 128.52 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.	08/20/2008
–	–	Landfill gas treatment and transport system components operated by the permittee	3,000 – 4,500 cfm	N/A	–	–	-

*The Size/Rated capacity and PCD efficiency are provided for informational purposes only, and are not applicable requirements.

III. Fuel Burning Equipment Requirements – (Emission Units A1-H6)

A. Limitations

1. 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 August 20, 2008)

2. 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 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 August 20, 2008)

3. 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 that 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 August 20, 2008)

4. 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 not greater than 96% for each period of continuous dual-fuel operation. This is accomplished by setting the assumed liquid fuel flow in MMBtus to the compliment to the assumed gas flow rate in Btus. An increase in the heat input ratio to the 48

dual-fuel diesel engines (A1-H6) to greater than 96% Gas Fraction 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 96% 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 August 20, 2008)

5. Any uncontrolled venting of landfill gas from 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 August 20, 2008)

6. 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 PM and PM-10) and Volatile Organic Compounds.

   (9 VAC 5-80-110 and Condition 7 of the minor NSR permit dated August 20, 2008)

7. 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 transport system, and the landfill gas treatment system, as specified in Condition III.A.13, 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 remaining engines or to the utility flare(s). If any engine or set of engines malfunctions, that 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 August 20, 2008)

8. The facility shall determine the heat value of the treated LFG 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, at 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 August 20, 2008)

9. The entire landfill gas treatment system, as specified in Condition III.A.13, is required to comply with 40 CFR 60.752 (b)(2)(iii) 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 the 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 August 20, 2008)

10. The approved fuels for the 48 dual-fuel diesel engines (A1-H6) are number 1 and number 2 - distillate oil, bio-diesel 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 August 20, 2008)

11. 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 number 1 distillate oil, number 2 distillate oil or bio-diesel fuel oil.
B = cubic feet of landfill gas consumed.

CV_{liq} = calorific value (heat content) in Btu/gallon of the corresponding liquid fuel as specified in Condition III.A.12; specifically 131,000 Btu/gallon for bio-diesel or 137,000 Btu/gallon for number 1 or 2 distillate oil.

CV_{LFG} = calorific value (heat content) in Btu/cubic foot of treated landfill gas as determined by Condition III.A.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)	5.52	0.255

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)	6.385	0.332

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 less than or equal to 96% of the total heat input for any period of continuous 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:

$$HI_{LFG} = \frac{B \times CV_{LFG}}{A \times CV_{liq} + B \times CV_{LFG}} \times 100 \leq 96\%$$

(9 VAC 5-80-110 and Condition 18 of the minor NSR permit dated September 26, 2007)

12. The fuel oils and treated landfill gas shall meet the specifications below:

    Distillate oils which meets the ASTM D396 specifications for numbers 1 and 2 fuel oil:
    Maximum sulfur content per shipment: 0.5%
    Average sulfur content: 0.25%
    Heat content: 137,000 BTU/gallon

    Bio-diesel fuel oil which meets the ASTM D6751 specifications:
    Maximum sulfur content per shipment: 0.5%
    Nominal heat content: 131,000 BTU/gallon

    Treated landfill gas:
    Minimum heat content: 200 Btu/scf

    The heat 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 III.A.10, III.A.11, III.A.14, and IV.A.1. The heat content of the treated landfill gas shall be analyzed for gross calorific value using method outlined in Condition III.A.8.

    (9 VAC 5-80-110 and Condition 19 of the minor NSR permit dated August 20, 2008)

13. Treated landfill gas shall be produced by the Brunswick Waste Management Facility, LLC (Registration No. 31007) as the facility is permitted by the Virginia Department of Environmental Quality and has been processed in accordance with 40 CFR60.752 (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 150 gallons. The primary and secondary knockout tanks are located at the Brunswick Waste Management Facility, LLC (Registration No. 31007). 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 August 20, 2008)

14. 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	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, NOx, 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 III.A.1 through III.A.7 and III.A.10 through III.A.13.

(9 VAC 5-80-110 and Condition 22 of the minor NSR permit dated August 20, 2008)

15. 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 setup, shutdown, and malfunction.
(9 VAC 5-80-110 and Condition 24 of the NSR permit dated August 20, 2008)

16. 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 1,440 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) and Table 2d (11) of 40 CFR 63 Subpart ZZZZ)

17. The facility shall combust treated landfill gas from the Brunswick Waste Management Facility, LLC (Reg. No. 31007) 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)

B. Monitoring

1. The facility shall be equipped with devices to continuously measure and record the consumption of treated landfill gas, distillate oil and bio-diesel fuel oil by the 48 dual-fuel diesel engines (A1-H6). Each monitoring 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 monitoring 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 August 20, 2008)

2. Each of the 48 dual-fuel diesel engines (A1-H6) shall be equipped with a device to continuously measure engine inlet charge-air temperature. Each monitoring 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 monitoring device shall be provided with adequate access for inspection and shall be in operation when the 48 dual-fuel diesel engines are operating.

   (9 VAC 5-80-110 and Condition 10 of the minor NSR permit dated August 20, 2008)

3. The facility shall be equipped with devices 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 monitoring 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 monitoring 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 11 of the minor NSR permit dated August 20, 2008)

4. The facility shall log observations of landfill gas fraction and inlet charge air temperature for each engine (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.

5. 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 August 20, 2008

6. The monitoring devices used to measure inlet charge-air temperature shall be observed by the facility with a frequency of not less than hourly whenever the engines are operating. The facility shall keep a daily log of the temperature observations from the monitoring devices including the time the observation was recorded.

   (9 VAC 5-80-110 and Condition 13 of the minor NSR permit dated August 20, 2008)

7. The monitoring device 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 engines with a frequency of not less than daily to ensure good performance of the treatment system. The facility shall keep a daily log of the observations from the monitoring device, including the change in pressure across the 10-micron filter.

   (9 VAC 5-80-110 and Condition 14 of the minor NSR permit dated August 20, 2008)

8. The facility shall drain the polishing tank referenced in Condition III.A.13 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 August 20, 2008)

9. Once per month, the facility 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 facility 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 observation 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 facility 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 facility 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 August 20, 2008)

C. Recordkeeping

1. The facility shall obtain a certification from the fuel supplier with each shipment of distillate oil or bio-diesel fuel oil. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier;

   b. The date on which the distillate oil or bio-diesel fuel oil was received;

   c. The volume of the distillate oil or bio-diesel fuel oil delivered in the shipment;

   d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications [D396-78] for numbers 1 or 2 fuel oil; and

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

   f. A statement that the sulfur content of the distillate oil or bio-diesel fuel oil does not exceed 0.5% by weight.

   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 III.A.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 August 20, 2008)

2. The facility shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Piedmont Region. These records shall include, but are not limited to:

   a. Annual throughput of landfill gas, distillate oil, and number 4 fuel 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 III.A.4, III.B.1, III.B.4, III.A.11 and III.A.17;

   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 III.A.4, III.A.11 and III.A.17. Heat input calculations shall be based on the data required by Condition III.B.4;

   d. Daily log of the polishing tank observation results as described in Condition III.B.7;

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

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

   g. Monthly and annual emission (in tons) using calculation methods approved by the Piedmont Regional Office to verify compliance with emission limitations in Conditions III.A.11, III.A.14, and IV.A.1. 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 III.B.6;

   i. Weekly landfill gas gross calorific value determination results, including % methane readings as described in Condition III.A.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 III.A.3;

o. Calculations demonstrating compliance with Condition III.A.17.

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

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 August 20, 2008)

3. The facility shall maintain all records required by MACT, Subpart ZZZZ, 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 III.A.16.

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 40 CFR §63.6655(e)(3) and Table 6 (9.a.ii).

(9 VAC 5-80-110 §63.6605(a-c), §63.6655(e)(3) and Table 6 (9.a.ii))

D. Testing

1. 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 III.A.11, III.A.14 and IV.A.1. 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 performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. 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 August 20, 2008)

2. 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 III.A.11, III.A.14, and IV.A.1. 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 96% gas fraction on a Btu basis with one point within 4% of the 96% end point. The tests shall be performed, and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated, but in no event later than 180

days after the date of issue of this permit. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. 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 NSR permit dated August 20, 2008)

3. An initial performance test shall be conducted for NO_x and CO from the 48 dual-fuel diesel engines (A1-H6), within 60 days of the Piedmont Regional Office receiving notice of the combustion of bio-diesel fuel oil, to determine compliance with the emission limits contained in Conditions III.A.11, III.A.14, and IV.A.1. Separate tests shall be performed while operating in single fuel mode using 100% bio-diesel fuel oil and in dual fuel mode using various quantities of landfill gas and bio-diesel fuel oil. The bio-diesel 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 96% gas fraction on a Btu basis with one point within 4% of the 96% end point. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. 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 NSR permit dated August 20, 2008)

4. Concurrently with the initial and subsequent performance test as required in Conditions III.D.1, III.D.2 and III.D.3, 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 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. 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 NSR permit dated August 20, 2008)

5. Concurrently with the initial and subsequent performance tests required in Conditions III.D.1, III.D.2 and III.D.3, 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. The evaluation shall be performed, reported and demonstrate compliance within 60 days after achieving the maximum production rate at which the facility will be operated but in no event later than 180 days after start-up of the permitted facility. 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 August 20, 2008)

6. The performance tests for NO_x and CO required in Conditions III.D.1 and III.D.2 shall at a minimum be conducted once every five years on all eight stacks and before the Title V operating permit renewal application submittal, starting from the completion date of the testing as required in Conditions III.D.1 and III.D.2. Each testing cycle shall evaluate the performance of a different set of six engines (stack) to ensure the accuracy of the equations in Condition III.A.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 96% gas fraction on a Btu basis with one point within 4% of the 96% end point. The tests shall be conducted and reported and data reduced as set forth in 9 VAC 5-50-30 and the test methods and procedures contained in each applicable section or subpart listed in 9 VAC 5-50-410. 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 August 20, 2008)

7. 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 August 20, 2008)

E. Reporting

1. The facility shall furnish written notification to the Director, Piedmont Region:

   a. The actual date on which the installation of the 12 engines (E1-F6) are installed within 30 days after such date.

   b. The anticipated start-up date of the engines (E1-F6) postmarked not more than 60 days nor less than 30 days prior to such date.

   c. The actual start-up date of the additional engines (E1-F6) within 15 days after such date.

   d. The anticipated date of performance tests of the dual-fuel electrical power generating plant postmarked at least 30 days prior to such date.

   e. The actual date on which the installation of the additional 12 engines (G1-H6) are installed within 30 days after such date.

   f. The anticipated start-up date of the additional engines (G1-H6) postmarked not more than 60 days nor less than 30 days prior to such date.

   g. The actual start-up date of the additional engines (G1-H6) within 15 days after such date.

   (9 VAC 5-80-110 and Condition 35 of the minor NSR permit dated August 20, 2008)

2. 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 48 of the minor NSR permit dated August 20, 2008)

3. The facility shall submit all of the notifications in 40 CFR §§63.7 (b) and (c), 63.8 (e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply by the dates specified.

   (9 VAC 5-80-110 and 40 CFR §§63.6645 (a)(2) and 63.6665)

4. The facility shall submit an annual report to the Director, Piedmont Regional Office containing the fuel flow rate of each fuel and the heating values that were used in the calculations demonstrating that the percentage of heat input provided by landfill gas is equivalent to 10 percent of more of the gross heat input on an annual basis and any problems or errors suspected with the fuel meters along with any corrective action taken. This report may be submitted at the same time as the Annual Compliance Certification submittal required in Condition VII.D and be based upon the same time period as the certification.

   (9 VAC 5-80-110)

IV. Facility Wide Conditions

A. Limitations

1. 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	52.8	lb/hour	125.4	tons/year
PM-10	52.8	lb/hour	125.4	tons/year
PM-2.5	52.8	lb/hour	125.4	tons/year
Sulfur Dioxide	89.0	lb/hour	30.0	tons/year
Nitrogen Oxides	422.8	lb/hour	240.0	tons/year
Carbon Monoxide	757.5	lb/hour	240.0	tons/year
Volatile Organic Compounds	70.5	lb/hour	167.2	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 III.A.1 through III.A.7, III.A10, III.A.11, III.A12 and III.A.13.

   (9 VAC 5-80-110 and Condition 23 of the minor NSR permit dated August 20, 2008)

V. 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 (5-80-720 B)	Rated Capacity (5-80-720 C)
T1	Fuel oil storage tank	5-80-720 B.	VOC	30,000 Gallon
T2	Fuel oil storage tank	5-80-720 B.	VOC	30,000 Gallon
T3	Fuel oil storage tank	5-80-720 B.	VOC	30,000 Gallon
T4	Fuel oil storage tank	5-80-720 B.	VOC	30,000 Gallon
T5	Lubricating oil storage tank	5-80-720 B.	VOC	1,000 Gallon
T6	Used Lubricating oil storage tank	5-80-720 B.	VOC	1,000 Gallon
B1	Boiler for space heating (Exempt 10/10/2007)	5-80-720 B.	NOx, SO2, CO, VOC, PM/PM-10	(0.156 mmBTU/hr)

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.

VI. 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
9VAC5-40-880 through 9 VAC 5-40-1050	Emission Standards for Fuel Burning Equipment (Rule 4-8)	Rule 4-8 does not apply to stationary internal combustion engines as stated in 9 VAC 5-40-880.E.
40 CFR Part 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	The CI RICEs were constructed before the applicability date of July 11, 2005, and have not been modified.
40 CFR Part 64	Compliance Assurance Monitoring	The CI RICEs do not have add-on pollution control devices.
40 CFR Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	The facility is exempt from the standard based on size, largest tanks are 30,000 gallons, and from the Subpart Kb recordkeeping requirements as revised on October 13, 2003.
40 CFR Part 60 Subpart WWW –Specific to Sections Regarding Collection and Destruction of Landfill Gas	Standards of Performance for Municipal Solid Waste Landfills	Source is exempt from sections regarding collection and destruction of landfill gas as long as INGENCO Brunswick Plant's treatment of the landfill gas meets the requirements listed in 40 CFR, Part 60.752(b)(2)(iii)(C)

NSPS Subpart AAAA– Specific to Sections Regarding Collection and Destruction of Landfill Gas	Small Municipal Waste Combustion Units for Which Construction is Commenced After August 30, 1999 or for Which Modification or Reconstruction is Commenced After June 6, 2001	Source is exempt from sections regarding collection and destruction of landfill gas as long as INGENCO Brunswick Plant's treatment of the landfill gas meets the requirements listed in 40 CFR, Part 60.752(b)(2)(iii)(C)
MACT Subpart A - 40 CFR Part 63.6(d), 63.6(e), 63.6(h), 63.7(e)(1), 63.8(a)(4), 63.8(c)(5), 63.9(d), 63.10(b)(2)(i)-(v), 63.10(d)(3), 63.1(e)(2)(ii), 63.10(e)(4), and 63.11	General Provisions	Facility is exempted by complying with MACT Subpart ZZZZ requirements.

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)

VII. General Conditions

A. 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 N)

B. 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.

1. 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.

2. 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.

3. 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.

4. 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.

5. 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 by 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 B, C, and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

C. Recordkeeping and Reporting

1. 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 F)

2. 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 F)

3. 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 F)

D. 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 Region III 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. 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. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

1. The time period included in the certification. The time period to be addressed is January 1 to December 31.

2. The identification of each term or condition of the permit that is the basis of the certification.

3. The compliance status.

4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.

5. 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.

6. Such other facts as the permit may require to determine the compliance status of the source.

7. 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 K.5)

E. 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. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

F. 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, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

G. 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 G.1)

H. 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 G.2)

I. 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 G.3)

J. 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 5-80-190 and 9 VAC 5-80-260)

K. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

L. Duty to Submit Information

1. 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 G.6)

2. 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)

M. 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. 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.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

N. 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:

1. 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;

2. 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;

3. 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;

4. 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,

5. 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)

O. 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)

P. 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 J)

Q. 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:

1. 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.

2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.

3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.

4. 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 K.2)

R. 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.

1. 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.

2. 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.

3. 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 L)

S. 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 E)

T. Transfer of Permits

1. 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 5-80-160)

2. 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 5-80-160)

3. 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 5-80-160)

U. Malfunction as an Affirmative Defense

1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.

2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:

a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.

b. The permitted facility was at the time being properly operated.

c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.

d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F.2.b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.

4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

V. 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 5-80-190 C and 9 VAC 5-80-260)

W. 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 5-80-80 E)

X. 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.

(40 CFR Part 82, Subparts A-F)

Y. 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 A.1)

Z. 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.

(40 CFR Part 68)

AA. 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 I)

BB. 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:

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

2. 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.

3. 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 I)

VIII. State-Only Enforceable Requirements

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

9 VAC 5-50-310, Odorous Emissions