



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

355-A Deadmore Street, Abingdon, Virginia 24210

Phone (276) 676-4800 Fax (276) 676-4899

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

December 2, 2014

Mr. Todd S. Jonas
Vice President
Wolf Hills Energy, LLC
14302 FNB Parkway
Omaha, Nebraska 68154

Location: Washington County
Registration No: 11348

Dear Mr. Jonas:

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/or civil charges. Please read all conditions carefully.

This approval to operate does not relieve Wolf Hills Energy, 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 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.

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. Todd S. Jonas
December 2, 2014
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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 me at (276) 676-4835.

Sincerely,

Rob Feagins
Air Permit Manager

Attachment: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Permits and Technical Assessment Branch (3AP11), U.S. EPA, Region III (electronic file submission)



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Federal Operating Permit Article 3

This permit is based upon Federal Clean Air Act acid rain permitting requirements of Title IV, federal operating permit requirements of Title V; and Chapter 80, Article 3 and Chapter 140 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, 9 VAC 5-80-360 through 9 VAC 5-80-700 and 9 VAC 5-140-10 through 9 VAC 5-140-900 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: Wolf Hills Energy, LLC
Facility Name: Wolf Hills Energy, LLC
Facility Location: 14555 Industrial Park Road
Washington County, Virginia

Registration Number: 11348
Permit Number: SWRO11348

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 1 through 28)

Federally Enforceable Requirements - Phase II Acid Rain Allowances and Requirements (Page 28)

Federally Enforceable Requirements - Clean Air Interstate Rule (CAIR) Requirements (Page 28)

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December 2, 2014
Effective Date

December 1, 2019
Expiration Date

Allen J. Newman, P.E.
Regional Director

December 1, 2014
Signature Date

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Permit Conditions, 28 pages

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Facility Information

Permittee
Wolf Hills Energy, LLC
14302 FNB Parkway
Omaha, Nebraska 68154

Responsible Official
Mr. Todd S. Jonas
Vice President

Acid Rain and CAIR Trading Program Designated Representative
Mr. Todd S. Jonas
Vice President

Facility
Wolf Hills Energy, LLC
14555 Industrial Park Road
Bristol, Virginia 24202

Contact Person
Mr. Larry Carlson
Director, Air Programs
(402) 691-9500

County-Plant Identification Number: 51-191-00180

ORIS Code: 55285

NATS Facility Identification Number: 055285

Facility Description: NAICS 221112 - Wolf Hills Energy is a peaking electric power generation facility consisting of five Pratt & Whitney FT8 Twin Pac simple cycle gas turbine generator sets and one Caterpillar C27 diesel engine-generator set. Each Twin Pac generator set has a maximum heat input capacity of 520.5 million British thermal units per hour (MMBtu/hr), with a rated base load of 57.3 megawatts (MW) output, and is powered by two gas turbines using natural gas exclusively as a fuel. The Caterpillar diesel engine-generator set has a maximum heat input capacity of 7.4504 MMBtu/hr, with a maximum rated output of 750 kilowatts (kW), and is used for emergency (black start) purposes, only.

Emission Units

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
Fuel Burning Equipment							
WH01	1a	Pratt & Whitney FT8 Twin Pac #1a gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-1 CD-11	NO _x CO & VOC	April 3, 2014
WH02	1b	Pratt & Whitney FT8 Twin Pac #1b gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-2 CD-12	NO _x CO & VOC	April 3, 2014
WH03	2a	Pratt & Whitney FT8 Twin Pac #2a gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-3 CD-13	NO _x CO & VOC	April 3, 2014
WH04	2b	Pratt & Whitney FT8 Twin Pac #2b gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-4 CD-14	NO _x CO & VOC	April 3, 2014
WH05	3a	Pratt & Whitney FT8 Twin Pac #3a gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-5 CD-15	NO _x CO & VOC	April 3, 2014
WH06	3b	Pratt & Whitney FT8 Twin Pac #3b gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-6 CD-16	NO _x CO & VOC	April 3, 2014
WH07	4a	Pratt & Whitney FT8 Twin Pac #4a gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-7 CD-17	NO _x CO & VOC	April 3, 2014
WH08	4b	Pratt & Whitney FT8 Twin Pac #4b gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-8 CD-18	NO _x CO & VOC	April 3, 2014
WH09	5a	Pratt & Whitney FT8 Twin Pac #5a gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-9 CD-19	NO _x CO & VOC	April 3, 2014
WH10	5b	Pratt & Whitney FT8 Twin Pac #5b gas turbine	260.25 MMBtu/hr	Water injection Oxidation catalyst	CD-10 CD-20	NO _x CO & VOC	April 3, 2014
BS1	BS1a	Caterpillar diesel engine-generator set, model C27	7.4504 MMBtu/hr	Turbocharging/ Aftercooling	-----	NO _x	April 3, 2014

* Note: The size/rated capacity is provided for informational purposes only, and is not an applicable requirement.

Fuel Burning Equipment Requirements - WH01 - WH10 and BS1

1. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - The permittee shall meet all the applicable requirements of 40 CFR 60, Subpart GG – Standards of Performance for Stationary Gas Turbines.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-410 and Condition 2 of 4/3/14 Permit)
2. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Sulfur dioxide (SO₂) and particulate matter (PM) emissions from each combustion turbine shall be controlled by the use of pipeline quality natural gas fuel with maximum sulfur content not to exceed 0.8 percent by weight. The annual average sulfur content of the natural gas fuel shall not exceed 0.3 grains per 100 dry standard cubic feet, calculated monthly as the average of each consecutive 12-month period.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition 3 of 4/3/14 Permit)
3. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Except during startup, shutdown, black start testing and black start events, nitrogen oxide (NO_x) emissions from each combustion turbine shall be controlled by water injection. When natural gas is fired in a combustion turbine, water shall be injected into the combustion turbine to control nitrogen oxide emissions. The rate of water injection shall be at least that established during emissions tests as being sufficient to meet the emissions standards set forth in this permit.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 4 of 4/3/14 Permit)
4. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Carbon monoxide (CO) and volatile organic compound (VOC) emissions from each combustion turbine shall be controlled by a high temperature oxidation catalyst. The catalysts shall be operated within their optimum operating temperature range, and the catalyst material shall be tested periodically to predict and determine catalyst life for operation of this facility.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 5 of 4/3/14 Permit)
5. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - CO, VOC, PM and formaldehyde emissions from each combustion turbine shall be minimized by the use of good combustion operating practices.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 6 of 4/3/14 Permit)
6. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - NO_x emissions from the engine-generator set shall be controlled by turbocharging and aftercooling. The permittee shall maintain documentation that demonstrates turbocharging and aftercooling devices have been installed on the engine-generator set. The engine-generator set shall be provided with adequate access for inspection.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 7 of 4/3/14 Permit)

7. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - The permittee shall operate and maintain the engine-generator set according to the manufacturer's written instructions or procedures developed by the permittee that are approved by the engine manufacturer. In addition, the permittee may only change those settings that are permitted by the manufacturer and do not increase air emissions. The permittee shall operate and maintain the engine that achieves the emission standards required in 40 CFR 60.4205 over the entire life of the engine. The permittee shall meet the requirements of 40 CFR part 89, as they apply.
(9 VAC 5-80-490 B & C, 40 CFR 60.4211(a), 40 CFR 60.4206, 40 CFR 63.6590(c)(1) and Condition 11 of 4/3/14 Permit)
8. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - The engine-generator set shall only be operated as follows:
 - a. In situations where immediate action on the part of the facility is needed due to a failure or loss of electrical power service resulting from a failure of the primary power provider and the failure or loss of power service is beyond the reasonable control of the facility. Operation under these circumstances shall not exceed 6,000 hours per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. For the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of the unit is limited to 100 hours per year. These 100 hours shall be counted toward the 6,000 hours per year provided for emergency operation as defined in paragraph a. of this condition. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
(9 VAC 5-80-490 B & C, 40 CFR 60.4211(f), 40 CFR 63.6590(c)(1) and Condition 12 of 4/3/14 Permit)
9. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - The approved fuel for all of the combustion turbines is pipeline quality natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 13 of 4/3/14 Permit)
10. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - The approved fuel for the engine-generator set is diesel fuel. The diesel fuel shall meet the ASTM D975 specification for S15 diesel fuel oil with a maximum sulfur content per shipment of 0.0015 percent. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260, 40 CFR 60.4207(b), 40 CFR 63.6590(c)(1) and Condition 14 of 4/3/14 Permit)

11. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - The five Twin Pac generator sets shall consume no more than 4,679 million standard cubic feet (MMSCF) of natural gas per year, calculated daily as the sum of each consecutive 365-day period.
 (9 VAC 5-80-490 B & C, 9 VAC 5-170-160 and Condition 15 of 4/3/14 Permit)

12. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - The fuel-bound nitrogen content of the natural gas to be burned in the turbines shall not exceed 0.015 percent by weight.
 (9 VAC 5-80-490 B & C, 9 VAC 5-50-20, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition 16 of 4/3/14 Permit)

13. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Emissions from the operation of the ten (10) combustion turbines shall not exceed the limits specified below:

	(each at base/peak load)	(combined total)
	<u>lb/hr</u>	<u>tons/yr</u>
Particulate Matter	3.0	27.7
PM-10	3.0	27.7
Sulfur Dioxide	0.27	2.0
Nitrogen Oxides (25 ppmvd* for FBN ≤ 0.015%) (as NO ₂)	29.6	249.0
Carbon Monoxide (25 ppmvd*)	18.0	151.6
Volatile Organic Compounds	2.2	18.9

*(ppm by volume, one hour average at 15% oxygen as a dry sample and at ambient pressure, as measured per EPA Methods 10 and 20 of 40 CFR 60 Appendix A)
 FBN – Fuel Bound Nitrogen, percent by weight

The approved methods for determining compliance with this condition include compliance with conditions 1 – 5, 9, 11 and 12; or DEQ-approved source emission tests. DEQ reserves the authority to require source emission tests for any regulated air pollutant.
 (9 VAC 5-80-490 B & C, 9 VAC 5-50-260, 9 VAC 5-50-410 and Condition 19 of 4/3/14 Permit)

14. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - Emissions from the operation of the engine-generator set shall not exceed the limits specified below:

	<u>g/kW-hr</u>	<u>lb/hr</u>	<u>tons/yr</u>
Particulate Matter	0.25		
Nitrogen Oxides (as NO ₂)		13.2	39.6
Carbon Monoxide	4.4	0.6	1.9
Non-methane Hydrocarbons plus nitrogen oxides	8.0		

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 6, 7, 8 and 10.

(9 VAC 5-80-490 B & C, 9 VAC 5-50-260, 40 CFR 60.4205(b), 40 CFR 60.4212(c), 40 CFR 63.6590(c)(1) and Condition 20 of 4/3/14 Permit)

15. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Emissions of nitrogen oxides from the operation of each combustion turbine shall not exceed 112.7 ppmvd as a one hour average at 15% oxygen, adjusted to International Standards Organization (ISO) standard ambient conditions in accordance with Subpart GG of the NSPS. The permittee shall provide hourly average records of the ambient temperature, ambient humidity, and combustor inlet pressure so that the NO_x emissions data can be corrected to ISO standard ambient conditions, upon request of the DEQ, in order to demonstrate compliance with this emission standard. The permittee shall expeditiously repair or replace ambient monitoring instrumentation in the event of instrument malfunction. In the event of malfunction, equivalent data may be provided from local representative meteorological sources.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-50, 9 VAC 5-170-160, 9 VAC 5-50-410 and Condition 21 of 4/3/14 Permit)

16. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Limitations** - Visible emissions from each combustion turbine exhaust stack shall not exceed ten (10) percent opacity as determined by EPA Method 9 (Reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown or malfunction.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 22 of 4/3/14 Permit)

17. **Fuel Burning Equipment Requirements - (BS1) - Limitations** - Visible emissions from the engine-generator exhaust stack shall not exceed ten percent (10%) opacity except during one 6-minute period in any one hour in which visible emissions shall not exceed twenty (20) percent opacity as determined by EPA Method 9 (Reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown or malfunction.
(9 VAC 5-80-490 B & C, 9 VAC 5-50-260 and Condition 23 of 4/3/14 Permit)

18. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring** - Continuous monitoring systems shall be installed and operated to monitor and record the fuel consumption and ratio of water injected to fuel being fired in each turbine. These monitoring systems shall be operated at all times that water is being injected into the turbines. The systems shall be maintained and calibrated in accordance with manufacturer's specifications. As a minimum, the monitoring systems shall be inspected at least annually thereafter by a professional engineer employed or retained by the permittee. The permittee shall maintain the records of fuel consumption and ratio of water to fuel being fired at the site. These records shall be kept on file for the most current five year period and available for inspection by DEQ personnel.
(9 VAC 5-80-490 E, 9 VAC 5-50-20, 9 VAC 5-50-40, 9 VAC 5-50-50, 9 VAC 5-50-410 and Condition 8 of 4/3/14 Permit)

19. **Fuel Burning Equipment Requirements - (BS1) - Monitoring** - The engine-generator set shall be equipped with a non-resettable hour metering device to monitor the operating hours. The non-resettable hour meter used to continuously measure the hours of operation for the engine-generator set shall be observed by the permittee with a frequency of not less than once each day the engine-generator set is operated. The permittee shall keep a log of these observations. Each monitoring device shall be installed, maintained, calibrated (as appropriate) and operated in accordance with approved procedures which shall include, as 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 engine-generator set is operating.
(9 VAC 5-80-490 E, 9 VAC 5-50-20, 9 VAC 5-50-40 and Condition 9 of 4/3/14 Permit)

20. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring** - The permittee shall monitor the sulfur content of the natural gas being fired in the combustion turbines, in accordance with Subpart GG of the NSPS and subsection a. below. The permittee shall comply with the custom fuel sulfur monitoring schedule contained in subsection b. of this condition. The permittee may submit subsequent custom fuel sampling schedules through the DEQ for EPA approval. The permittee shall maintain records certifying the sulfur content of the gas.
 - a. Analysis for the sulfur content of the natural gas shall be conducted as referenced in 40 CFR 60.334(h)(1) and 40 CFR 60.335(b)(10), using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels or an approved alternative method. Fuel vendor analyses by these methods may be used.

- b. Sulfur monitoring shall be conducted once per quarter.
- c. Should any sulfur analysis required above indicate noncompliance, the permittee shall notify the Southwest Regional Office. Sulfur monitoring shall be conducted each day the turbines operate during the interim period prior to this initial schedule receiving EPA approval, or during an interim period when this custom schedule is being reexamined due to noncompliance, and those results may be submitted to show compliance.
- d. If there is a change in fuel supply, the permittee must notify the Director, Southwest Regional Office of such change for reexamination of this custom schedule. A change in fuel quality may be deemed a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being reexamined.

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

(9 VAC 5-80-490 E, 9 VAC 5-50-260, 9 VAC 5-50-410, 9 VAC 5-170-160 and Condition 18 of 4/3/14 Permit)

21. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring** - The permittee shall perform a visible emission observation on the exhaust stack of each combustion turbine at least once each calendar week to determine the presence of visible emissions while operating (does not include condensed water vapor/steam). If during the observation, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted on each affected unit in accordance with 40 CFR 60, Appendix A, Method 9. The VEE shall be conducted for a minimum of six minutes. If any observations exceed ten percent (10%) opacity, the VEE shall be conducted for a total of 60 minutes. A Method 9 evaluation shall not be required if the visible emissions condition is corrected as expeditiously as possible, such that no visible emissions exist; the emissions unit is operating at normal conditions; and, the cause and corrective measures taken are recorded. A record of each visible emissions observation shall be maintained, including, at a minimum, the date, time, name of the emission unit, the applicable emission requirement, the results of the observation and the name of the observer. A record of each VEE shall be maintained and shall include, at a minimum, any data required by 40 CFR 60, Appendix A, Method 9.
(9 VAC 5-80-490 E & F)

22. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall monitor, operate, calibrate and maintain the combustion turbines and control equipment according to the following:

Applicable Requirement	NO_x Limits	CO Limits
Measurement Approach	Monitor fuel consumption, water-to-fuel ratio target (as defined in the indicator range section of this table) and water-to-fuel ratio	Monitor turbine load and verify catalyst activity
Monitoring Methods and Location	<ul style="list-style-type: none"> • Fuel consumption by fuel flow meter; • Water consumption by water flow meter; • Water-to-fuel ratio target by individual engine water schedule and fuel flow meter; and • Water-to-fuel ratio by fuel flow meter and water flow meter 	<p>Turbine instrumentation for load</p> <p>Representative samples of catalyst for activity</p>
Indicator Range	<p>The water-to-fuel injection ratio will be greater than the value 5% below the water-to-fuel ratio target. This is a direct comparison of the fuel flow meter to the water injection schedule established in the attached (Attachment A) Exhaust Gas Temperature Curve/Tuning Curve/Topper Curve tables and emissions test data as being sufficient to meet the NO_x emissions standards set forth in this permit.</p> <p>An excursion is defined as a water-to-fuel ratio that does not meet or exceed the value 5% below water-to-fuel ratio target.</p>	Turbines to be operated at a minimum of 50 percent load, and an excursion is defined as a value less than 50 percent load, except during startup and shutdown.
Data Collection Frequency	Fuel consumption, water-to-fuel ratio data and water-to-fuel ratio target to be measured continuously.	Load data to be collected hourly. Catalysts from 2 of 10 units to be sampled annually.
Averaging Period	Hourly for fuel consumption, water-to-fuel ratio and water-to-fuel ratio target	Three-hour periods for load data
Recordkeeping	Data acquisition system (DAS) stores hourly averages for water-to-fuel ratio, water-to-fuel ratio target and fuel consumption.	<p>DAS records turbine load</p> <p>Reports of catalyst activity to be maintained for 5 years.</p>
QA/QC Practices and Criteria	Fuel and water flow meters to be calibrated annually.	Instrumentation for recording turbine loading to be calibrated annually per manufacturer's recommendations.

(9 VAC 5-80-490 E and 40 CFR 64.6 (c))

23. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.
(9 VAC 5-80-490 E and 40 CFR 64.6 (c))
24. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
(9 VAC 5-80-490 E and 40 CFR 64.7 (b))
25. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that turbines are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.
(9 VAC 5-80-490 E and 40 CFR 64.7 (c))
26. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - Upon detecting an excursion or exceedance, the permittee shall restore operation of the turbines (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.
(9 VAC 5-80-490 E and 40 CFR 64.7(d)(1))
27. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may

include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(9 VAC 5-80-490 E and 40 CFR 64.7(d)(2))

28. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Southwest Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
(9 VAC 5-80-490 E and 40 CFR 64.7(e))
29. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Monitoring - Compliance Assurance Monitoring (CAM)** - If the number of exceedances or excursions exceeds 5 percent duration of the operating time for a combustion turbine for a reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
- a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
- (9 VAC 5-80-490 E and 40 CFR 64.8(a) and (b))
30. **Fuel Burning Equipment Requirements - (BS1) - Recordkeeping** - The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel. Each fuel supplier certification shall include the following:
- a. The name of the fuel supplier;
 - b. The date on which the diesel fuel was received;

- c. The quantity of diesel fuel delivered in the shipment;
- d. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for S15 diesel fuel oil; and
- e. The sulfur content of the diesel fuel.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 10. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits.
(9 VAC 5-80-490 B & C and Condition 17 of 4/3/14 Permit)

31. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Southwest Regional Office. These records shall include, but are not limited to:
- a. The combined fuel consumption of the five Twin Pac generator sets, calculated daily as the sum of each consecutive 365-day period;
 - b. An on-site parameter monitoring plan, or alternatively a quality-assurance plan in accordance with 40 CFR 60.334(g);
 - c. All the fuel analysis reports for sulfur and nitrogen content in accordance with conditions 12 and 20;
 - d. Annual NO_x emission reports, calculated daily as the sum of each consecutive 365-day period;
 - e. Continuous records of the ambient temperature, ambient humidity and combustor inlet pressure; and
 - f. Weekly visual observations of the combustion turbine exhaust stacks and any visible emissions evaluations.

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

(9 VAC 5-50-50, 9 VAC 5-80-490 C & F, 9 VAC 5-50-410 and Condition 24 of 4/3/14 Permit)

32. **Fuel Burning Equipment Requirements - (BS1) - Recordkeeping** - The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with

the Director, Southwest Regional Office. These records shall include, but are not limited to:

- a. Annual hours of operation of the engine-generator set, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months;
- b. The log of non-resettable hour metering device observations;
- c. All fuel supplier certifications;
- d. Engine information including make, model, serial number, model year, maximum brake horsepower (bhp) and engine displacement for the engine-generator set;
- e. The manufacturer's written operating instructions or procedures developed by the owner/operator that are approved by the engine manufacturer for the engine-generator set; and
- f. Records of the reasons for operation for the engine-generator set including, but not limited to, the date, cause of operation, cause of the emergency and hours of operation.

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

(9 VAC 5-50-50, 9 VAC 5-80-490 C & F and Condition 24 of 4/3/14 Permit)

33. Fuel Burning Equipment Requirements - (WH01 - WH10 and BS1) - Recordkeeping -

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 effect 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; and
- 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 5-80-490 C & F, 9 VAC 5-50-20 E and Condition 33 of 4/3/14 Permit)

34. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Compliance Assurance Monitoring (CAM) Recordkeeping** - The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP) required pursuant to §64.8 and any activities undertaken to implement a quality improvement plan (QIP), and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
(9 VAC 5-80-490 C & F and 40 CFR 64.9(b))
35. **Fuel Burning Equipment Requirements - (WH01 - WH10 and BS1) -Testing** - The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
(9 VAC 5-50-30, 9 VAC 5-80-490 E & F and Condition 10 of 4/3/14 Permit)
36. **Fuel Burning Equipment Requirements - (WH01 - WH10 and BS1) -Testing** - If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the appropriate method(s) in accordance with procedures approved by the DEQ.
(9 VAC 5-80-490 E)
37. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Reporting** - The permittee shall submit semi-annual reports of excess emissions to the Director, Southwest Regional Office in accordance with 40 CFR Part 60, Section 7(c). The time periods to be addressed are January 1 to June 30, and July 1 to December 31. The report shall be postmarked by the 30th day following the end of each six-month period. In addition to the information required by 40 CFR Part 60, Section 7(c), each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions and gas turbine load during the period of excess emissions. For the purpose of this report, periods of excess emissions are defined as follows:
 - a. Excluding black start testing, any one hour period during which the average water-to-fuel ratio, as measured by the continuous emission monitoring system, falls below the average water-to-fuel ratio determined to demonstrate compliance with the nitrogen oxide ppmvd limits specified in Condition 13 during the most recent compliance test.
 - b. Any period during which the sulfur content of the natural gas being fired in the gas turbines exceeds 0.8 percent by weight.
 - c. Operating hours when monitoring data is not available.
(9 VAC 5-50-20, 9 VAC 5-50-50, 9 VAC 5-50-410, 9 VAC 5-170-160, 9 VAC 5-80-490 F and Condition 27 of 4/3/14 Permit)

38. **Fuel Burning Equipment Requirements - (WH01 - WH10) - Compliance Assurance Monitoring (CAM) Reporting** - The permittee shall submit CAM reports as part of the Title V semi-annual monitoring reports required by Condition 50 of this permit to the Director, Southwest Regional Office. Such reports shall include at a minimum:
- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
 - b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
 - c. A description of the actions taken to implement a quality improvement plan (QIP) during the reporting period as specified in §64.8. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
- (9 VAC 5-80-490 F and 40 CFR 64.9(a))

Insignificant Emission Units

39. **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 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
WH01	Pratt & Whitney FT8 Twin Pac #1a	5-80-720 B.5.	All HAPs	N/A
WH02	Pratt & Whitney FT8 Twin Pac #1b	5-80-720 B.5.	All HAPs	N/A
WH03	Pratt & Whitney FT8 Twin Pac #2a	5-80-720 B.5.	All HAPs	N/A
WH04	Pratt & Whitney FT8 Twin Pac #1b	5-80-720 B.5.	All HAPs	N/A

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720B)	Rated Capacity (9 VAC 5-80-720C)
WH05	Pratt & Whitney FT8 Twin Pac #3a	5-80-720 B.5.	All HAPs	N/A
WH06	Pratt & Whitney FT8 Twin Pac #3b	5-80-720 B.5.	All HAPs	N/A
WH07	Pratt & Whitney FT8 Twin Pac #4a	5-80-720 B.5.	All HAPs	N/A
WH08	Pratt & Whitney FT8 Twin Pac #4b	5-80-720 B.5.	All HAPs	N/A
WH09	Pratt & Whitney FT8 Twin Pac #5a	5-80-720 B.5.	All HAPs	N/A
WH10	Pratt & Whitney FT8 Twin Pac #5b	5-80-720 B.5.	All HAPs	N/A
BS1	Caterpillar Diesel Generator, Model C27	5-80-720 B.5.	All HAPs	N/A

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 5-80-490 C, E and F.

Permit Shield & Inapplicable Requirements

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

Citation	Title of Citation	Description of Applicability
None identified		

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

- 41. **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 5-80-490 N)

- 42. **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 5-80-430, the right of the facility to operate shall be terminated upon permit expiration.
 (9 VAC 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

- 43. **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 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

- 44. **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 3, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-510.
 (9 VAC 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

- 45. **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 5-80-430 for a renewal permit, except in compliance with a permit issued under Article 3, Part II of 9 VAC 5 Chapter 80.
 (9 VAC 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)

46. **General Conditions - Permit Expiration** - If an applicant submits a timely and complete application under section 9 VAC 5-80-430 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 5-80-500, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
(9 VAC 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)
47. **General Conditions - Permit Expiration** - The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-430 shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-430 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 5-80-430 B, C, and F, 9 VAC 5-80-490 D and 9 VAC 5-80-530 B)
48. **General Conditions - Recordkeeping and Reporting** - All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
- a. The date, place as defined in the permit, and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.
(9 VAC 5-80-490 F)
49. **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 5-80-490 F)
50. **General Conditions - Recordkeeping and Reporting** - The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ 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 5-80-430 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purpose of this permit, deviations include, but are not limited to:
 - i. Exceedance of emissions limitations or operational restrictions;
 - ii. 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,
 - iii. Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."
(9 VAC 5-80-490 F)

51. **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 DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices for the period ending December 31. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. The permittee shall maintain a copy of the certification for five (5) years after submittal of the certification. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-430 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 5-80-490 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; and
- 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 5-80-490 K.5)

52. **General Conditions - Permit Deviation Reporting** - The permittee shall notify the Director, Southwest 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 Condition 50 of this permit.
(9 VAC 5-80-490 F.2)

53. **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, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Southwest 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. 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. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Southwest Regional Office.
(9 VAC 5-20-180 C)

54. **General Conditions - Failure/Malfunction Reporting** - The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.
(9 VAC 5-20-180 C and 9 VAC 5-50-50)
55. **General Conditions - Failure/Malfunction Reporting** - The emission units subject to the reporting and the procedure requirements of 9 VAC 5-50-50 C are listed below:
- a. WH01
 - b. WH02
 - c. WH03
 - d. WH04
 - e. WH05
 - f. WH06
 - g. WH07
 - h. WH08
 - i. WH09
 - j. WH10
(9 VAC 5-20-180 C and 9 VAC 5-50-50)
56. **General Conditions - Failure/Malfunction Reporting** - Each owner required to install a continuous monitoring system (CMS) or monitoring device subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in the applicable subpart in 9 VAC 5-50-410) and either a monitoring systems performance report or a summary report form, or both, to the board quarterly. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. All reports shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B.6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;

- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction.
(9 VAC 5-20-180 C and 9 VAC 5-50-50)

- 57. **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 5-80-490 G.1)
- 58. **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 5-80-490 G.2)
- 59. **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 5-80-490 G.3)
- 60. **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 5-80-190 and 9 VAC 5-80-260)
- 61. **General Conditions - Property Rights** - The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-490 G.5)
- 62. **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 5-80-490 G.6)

63. **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 5-80-430 G and 9 VAC 5-80-490 K.1.
(9 VAC 5-80-490 K.1)
64. **General Conditions - Duty to Pay Permit Fees** - The owner of any source for which a permit under 9 VAC 5-80-360 through 9 VAC 5-80-700 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 5-80-490 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)
65. **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)
66. **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)
67. **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 5-80-500 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 3.
(9 VAC 5-80-490 J)
68. **General Conditions - Inspection and Entry Requirements** - The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
- a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times' substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
(9 VAC 5-80-490 K.2)

69. **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 5-80-430 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 5-80-490 D.
(9 VAC 5-80-490 L)
70. **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 DEQ upon request.
(9 VAC 5-80-510 E)
71. **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 5-80-520)
72. **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 5-80-560.
(9 VAC 5-80-520)
73. **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 5-80-560.
(9 VAC 5-80-520)

74. **General Conditions - Malfunction as an Affirmative Defense** - A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements stated in Condition 75 are met.
(9 VAC 5-80-650)
75. **General Conditions - Malfunction as an Affirmative Defense** - 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 5-80-490 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.
(9 VAC 5-80-650)
76. **General Conditions - Malfunction as an Affirmative Defense** - In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
(9 VAC 5-80-650)
77. **General Conditions - Malfunction as an Affirmative Defense** - The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-650)
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 3. 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 5-80-490 G and L, 9 VAC 5-80-640 and 9 VAC 5-80-660)

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 5-80-430 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.
(40 CFR Part 82, Subparts A-F)
81. **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.
(40 CFR Part 68)
82. **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 5-80-490 I)
83. **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 5-80-490, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-500 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 5-80-360 through 9 VAC 5-80-700.
(9 VAC 5-80-490 I)

Phase II Acid Rain Allowances and Requirements

84. **Phase II Acid Rain Permit** - The Phase II Acid Rain permit in Attachment B to this document is incorporated into this permit by reference. The owners and operators of the source shall comply with the standard requirements and special provisions set forth in the application.
(9 VAC 5-80-440 and 9 VAC 5-80-490 A.4.a and c, B, C, E, F, M, O and P)

Clean Air Interstate Rule (CAIR) Requirements

85. **Clean Air Interstate Rule Requirements** - The permittee shall comply with all applicable CAIR requirements (9 VAC 5-140-1010 *et seq.*, 9 VAC 5-140-2010 *et seq.*, 9 VAC 5-140-3010 *et seq.*, 9 VAC 5-140-5010 *et seq.*, and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140. The CAIR permit and permit application in Attachment C to this document contain specific conditions and expires upon expiration of this Title V permit.
(9 VAC 5-80-110, 40 CFR Part 96 and 9 VAC 5 Chapter 140)

Attachment A

Exhaust Gas Temperature Curve/Tuning Curve/Topper Curve

Attachment B

Phase II Acid Rain Permit

Attachment C

CAIR Permit and Application



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

SOUTHWEST REGIONAL OFFICE

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Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

Allen J. Newman, P.E.
Regional Director

CLEAN AIR INTERSTATE RULE (CAIR) PERMIT

Issued To:	Wolf Hills Energy, LLC	Registration No: 11348
Operated By:	Wolf Hills Energy, LLC	ORIS Code: 55285
Location:	Bristol-Washington County Industrial Park Washington County, Virginia	Facility I.D. No. 51-191-00180

Permit Requirements:

The permittee shall comply with all applicable Clean Air Interstate Rule (CAIR) requirements (9 VAC 5-140-1010 et seq., 9 VAC 5-140-2010 et seq., 9 VAC 5-140-3010 et seq., and 40 CFR Part 96) by the compliance date in the respective Part of 9 VAC 5 Chapter 140, as contained in the CAIR Permit Application. This CAIR Permit is incorporated into the Title V permit for this facility and shall be in effect for the same time period as the Title V Permit. (9 VAC 5-80-490, 40 CFR Part 96 and 9 VAC 5 Chapter 140)

Allen J. Newman, P.E.
Regional Director

The CAIR permit consists of this page and the attached CAIR permit application dated March 5, 2014, and revised Certificate of Representation dated March 31, 2014.