



NRO-046-15

COMMONWEALTH of VIRGINIA

Molly Joseph Ward
Secretary of Natural
Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

David K. Paylor
Director

Thomas A. Faha
Regional Director

March 27, 2015

Mr. Robert Conrad
Operations Manager
Columbia Gas Transmission, L.L.C.
1700 MacCorkle Avenue SE
Charleston, WV 25314

Location: Loudoun County
Registration No. 72265
County-Plant ID No. 51-107-0125

Dear Mr. Conrad:

Attached is a renewal to your permit to operate your natural gas compressor station in Loudoun County pursuant to 9 VAC 5 Chapter 80, Article 1, of the Virginia Regulations for the Control and Abatement of Air Pollution. This permit incorporates provisions from the permit document issued on September 24, 2009.

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

In evaluating the application and arriving at a final decision to issue this permit, the Department deemed the application complete on May 8, 2014 and solicited written public comments by placing a newspaper advertisement in *The Loudoun Times Mirror* on February 4, 2015. The thirty-day comment period (provided for in 9 VAC 5-80-270) expired on March 9, 2015.

This approval to operate does not relieve Columbia Gas Transmission, L.L.C. 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:

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 Jonathan Carney at (703) 583-3863.

Sincerely,

James B. LaFratta
Regional Air Permit Manager

TAF/JBL/JWC/15046TV.docx

Attachment: Permit

cc: Kelly D. Taylor, Columbia Gas Transmission (pdf copy via email)
Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III
Manager/Inspector, Air Compliance
File



NRO-046-15

COMMONWEALTH of VIRGINIA

Molly Joseph Ward
Secretary of Natural
Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 Crown Court, Woodbridge, Virginia 22193-1453
(703) 583-3800 Fax (703) 583-3821
www.deq.virginia.gov

David K. Paylor
Director

Thomas A. Faha
Regional Director

FEDERAL OPERATING PERMIT ARTICLE 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1, of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 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: | Columbia Gas Transmission, L.L.C. |
| Facility Name: | Loudoun Compressor Station |
| Facility Location: | 40800 Compressor Lane, Leesburg, Virginia 20175 |
| Registration Number: | 72265 |
| Permit Number: | NRO72265 |

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Pages 5 through 29)

March 27, 2015
Effective Date

March 26, 2020
Expiration Date

Thomas A. Faha
Regional Director

Signature Date

Table of Contents, 1 page
Permit Conditions, 28 pages

Table of Contents

FACILITY INFORMATION.....3
EMISSION UNITS.....4
**FUEL BURNING EQUIPMENT REQUIREMENTS (EMISSION UNITS 06001- 6008, 06009,
060G1).....5**
FACILITY WIDE CONDITIONS.....16
INSIGNIFICANT EMISSION UNITS.....19
PERMIT SHIELD & INAPPLICABLE REQUIREMENTS.....20
GENERAL CONDITIONS.....21

Facility Information

Permittee

Columbia Gas Transmission, L.L.C.
1700 MacCorkle Avenue SE
Charleston, WV 25314

Responsible Official

Robert Conrad
Operations Manager

Facility

Columbia Gas Transmission, LLC
Loudoun Compressor Station
40800 Compressor Lane
Leesburg, VA 20175

Contact person

Kelly D. Taylor
Environmental Safety and Sustainability Coordinator
(304) 357-2047 (Phone)
(304) 357-2770 (Fax)
kellytaylor@nisource.com

AIRS Identification Number: 51-107-00125

Facility Description: NAICS 486210 - SIC 4922 - Natural Gas Transmission. The Loudoun Compressor Station is a natural gas compressor station. Natural gas is received via gas pipelines from an upstream compressor station, compressed, and pumped into outlet pipes for transmission to a downstream station. The natural gas is compressed using eight Solar Saturn T-1300 turbines, ISO rated at 1,350 horsepower (hp) each, and one Solar Centaur T-4500 turbine, ISO rated at 4,390 hp. All turbines utilize natural gas as the fuel for combustion. Auxiliary equipment includes a 221 hp emergency generator fueled by natural gas, one 1 MMBtu/hr natural gas fired boiler, a 1,000 gallon Lube Oil Tank, two 1,000 gallon Water Mixture Tanks, a 1,000 gallon Used Oil Tank, and a 1,000 gallon Pipeline Liquid Tank.

Emission Units

Table 1. Equipment to be Operated

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity (MMBtu/hr) | Size/Rated Capacity (hp) ¹ | Pollution Control Device Description (PCD) | PCD ID | Pollutant Controlled | Applicable Permit Date |
|------------------|----------|--|--------------------------------|---------------------------------------|--|--------|----------------------|------------------------|
| 06001 | E01 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06002 | E02 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06003 | E03 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06004 | E04 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06005 | E05 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06006 | E06 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06007 | E07 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06008 | E08 | Solar Saturn T-1300 | 21.2 ² | 1350 ⁴ | --- | --- | --- | September 24, 2009 |
| 06009 | E09 | Solar Centaur T-4500 | 58.4 ³ | 4390 ⁵ | --- | --- | --- | September 24, 2009 |
| 060G1 | G1 | Waukesha F11GSI – engine-generator set | 2.4 | 221 ⁶ | --- | --- | --- | September 24, 2009 |

¹The Size/Rated Capacity is provided for informational purposes only, and is not an applicable requirement.

²Based on the maximum HHV heat rate and maximum horsepower. The rated input heat capacity based on the LHV heat rate and rated horsepower is 14.46 MMBtu/hr.

³Based on the maximum HHV heat rate and maximum horsepower. The rated input heat capacity based on the LHV heat rate and rated horsepower is 39.72 MMBtu/hr.

⁴During periods of low ambient temperature (0°F), such as during winter months, the maximum output is 1,553 horsepower.

⁵During periods of low ambient temperature (0°F), such as during winter months, the maximum output is 5,049 horsepower.

⁶Maximum short-term output is 243 horsepower.

Fuel Burning Equipment Requirements - Combustion Turbines (Emission Units 06001 – 06008)

1. **Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations**
– Nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) emissions from the turbines shall be controlled by equipment design and operation. The turbines shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 2 of 09/24/09 Permit)
2. **Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations**
– Each turbine (Ref Nos. 06001 through 06008) shall not operate more than 7,000 hours per year, calculated monthly as the sum of each consecutive twelve month period. See Condition 43.I for method of determining compliance with this requirement.
(9 VAC 5-80-110 and Condition 4 of 09/24/09 Permit)
3. **Fuel Burning Equipment Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations** – The approved fuel for the turbines (Emission Units 06001 through 06008) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 7 of 09/24/09 Permit)
4. **Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations**
– The natural gas shall meet the specifications below:

NATURAL GAS:

Minimum heat content: 950 Btu/cf HHV as determined by ASTM D1826, D2382, or a Department of Environmental Quality (DEQ) approved equivalent method.

Sulfur Content: The maximum sulfur content of the natural gas to be burned in the turbines shall not exceed 20 grains per 100 dry standard cubic feet (scf). The annual average sulfur content of the natural gas to be burned in the turbines shall not exceed 3 grains per 100 dry standard cubic feet per year.

(9 VAC 5-80-110 and Condition 8 of 09/24/09 Permit)
5. **Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations**
– Each Solar Saturn T - 1300 turbines (Emission Units 06001 through 06008) shall consume no more than 101.3×10^6 cubic feet of natural gas per year, calculated monthly as the sum of each consecutive twelve-month period. See Condition 43.I for method of determining compliance with this requirement.
(9 VAC 5-80-110 and Condition 9 of 09/24/09 Permit)

6. **Fuel Burning Equipment Requirements – (Emission Units 06001–06008) – Limitations**
– Emissions from the operation of each Solar Saturn T-1300 turbine (Emission Units 06001 through 06008) shall not exceed the limitations specified below:

| | | |
|--|--------------------------------|--------------|
| Sulfur Dioxide | 0.2 lbs/hr | 0.5 tons/yr |
| Nitrogen Oxides | 76 ppmvd at 15% O ₂ | |
| Nitrogen Oxides (as NO ₂) | 5.4 lbs/hr | 15.8 tons/yr |
| Carbon Monoxide | 7.6 lbs/hr | 22.5 tons/yr |
| Volatile Organic Compounds | 0.3 lbs/hr | 0.9 tons/yr |

These emissions are derived from the actual turbine energy output in hp-hrs and DEQ approved pollutant-specific emission factors and equations. 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 Condition 5. (9 VAC 5-80-110, 40 CFR 60.332(a)(2), and Condition 13 of 09/24/09 Permit)

7. **Fuel Burning Equipment Requirements – (Emission Units 06001 Through 06008) – Limitations** – Visible emissions from each turbine (Emission Units 06001 through 06008) exhaust stack shall not exceed five percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). (9 VAC 5-80-110 and Condition 16 of 09/24/09 Permit)

8. **Fuel Burning Equipment Requirements – (Emission Units 06001 Through 06008) – Limitations** – Except where this permit is more restrictive than the applicable requirement, the turbines (Emission Units 06001 through 06008) shall be operated in compliance with the requirements of 40 CFR 60, Subpart GG. (9 VAC 5-80-110 and Condition 12 of 09/24/09 Permit)

9. **Fuel Burning Equipment Requirements – (Emission Units 06001 Through 06008) – Monitoring** – The source shall comply with fuel monitoring for sulfur content as specified by NSPS Subpart GG. In accordance with NSPS Subpart GG, fuel monitoring for sulfur content can be waived provided fuel combusted in the turbines is demonstrated to meet the definition of natural gas as follows:

- a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
- b. Representative fuel sampling data shows that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 is required.

(9 VAC 5-50-410 and 9 VAC 5-80-110)

10. **Fuel Burning Equipment Requirements – (Emission Unit 06001 Through 06008) – Testing** – The permittee shall measure the concentration of nitrogen oxides (NO_x), carbon monoxide (CO), and oxygen (O₂) in the exhaust gas stream from each of the eight Solar Saturn T-1300 gas turbines at least once every twenty-four month period. The first such test event under this permit term shall be performed within 180 days following the effective date of this permit. NO_x emissions shall represent the combined measured emissions of NO and NO₂, and shall be reported collectively as NO₂. NO_x emissions shall be reported in units of parts per million, dry volume, corrected to 15 percent O₂ and pounds of NO_x per hour (as NO₂). CO emissions shall be reported in units of parts per million, dry volume, corrected to 15 percent O₂, and pounds of CO per hour. The testing shall be conducted using test methods and procedures approved in advance by the DEQ. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's Northern Regional Office (NRO).
(9 VAC 5-80-110 E)

11. **Fuel Burning Equipment Requirements – (Emission Unit 06001 Through 06008) – Testing** – The permittee shall document all process parameters necessary to determine turbine performance with respect to the emission limits and standards of this permit during the periodic emissions testing on each turbine conducted in accordance with Condition 10. At a minimum, the following process parameters shall be monitored and recorded for each test:
- the work performed by the turbine tested, measured or reported in horsepower (hp);
 - the average exhaust gas volumetric flow rate per stack;
 - the amount of fuel consumed by the turbine during the emissions measurement;
 - other information necessary to determine emission factors for the turbine; and
 - the actual duration of the measurement.

(9 VAC 5-80-110 E)

12. **Fuel Burning Equipment Requirements – (emission unit 06001 through 06008) – Testing** – As determined in accordance with Condition 10, if the measured emission rate of NO_x or CO exceeds the emission standard for the respective pollutant, the permittee shall:
- Verify that the turbine is operating according to manufacturer's specifications, or other predetermined site-specific acceptable operating conditions. If a turbine is not operating properly, the permittee shall take corrective action immediately to reduce emissions to or below the emission standard. The permittee shall document pollutant emission rates within one week of applying corrective action to a turbine by measuring the concentration of pollutant(s) in the turbine exhaust gases. The measurement shall be conducted in accordance with procedures in Condition 10 of this permit, or other procedures approved in advance by the Regional Air Compliance Manager of the DEQ's NRO.

- b. If the corrective action in Condition 12.a above does not rectify the emission excursion, the permittee shall conduct a compliance test for the specific pollutant(s) of concern within 30 days of completing the corrective action on the turbine. The compliance testing shall be conducted in accordance with approved EPA reference methods as presented in Condition 46 of this permit, or other procedures approved in advance by the Regional Air Compliance Manager of the DEQ's NRO.

(9 VAC 5-80-110 E)

Fuel Burning Equipment Requirements – (Emission Unit 06009)

13. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations –** Nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC) emissions from the turbine shall be controlled by equipment design and operation. The turbine shall be provided with adequate access for inspection.
(9 VAC 5-80-110 and Condition 2 of 09/24/09 Permit)
14. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations –** Turbine (Emission Unit 06009) shall not operate more than 7,000 hours per year, calculated monthly as the sum of each consecutive twelve month period. See Condition 43.I for method of determining compliance with this requirement.
(9 VAC 5-80-110 and Condition 4 of 09/24/09 Permit)
15. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations –** The approved fuel for the turbine (Emission Unit 06009) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 7 of 09/24/09 Permit)
16. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations –** The natural gas shall meet the specifications below:

NATURAL GAS:

Minimum heat content: 950 Btu/cf HHV as determined by ASTM D1826, D2382, or a Department of Environmental Quality (DEQ) approved equivalent method.

Sulfur Content: The maximum sulfur content of the natural gas to be burned in the turbines shall not exceed 20 grains per 100 dry standard cubic feet. The annual average sulfur content of the natural gas to be burned in the turbines shall not exceed 3 grains per 100 dry standard cubic feet per year.

(9 VAC 5-80-110 and Condition 8 of 09/24/09 Permit)

17. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations** – The Solar Centaur T – 4500 turbine (Emission Unit 06009) shall consume no more than 278.4 x 10⁶ cubic feet of natural gas per year, calculated monthly as the sum of each consecutive twelve month period. See Condition 43.I for method of determining compliance with this requirement.
(9 VAC 5-80-110 and Condition 10 of 09/24/09 Permit)

18. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations** – Emissions from the operation of the Solar Centaur T-4500 turbine (Emission Unit 06009) shall not exceed the limitations specified below:

| | | |
|--|---------------------------------|--------------|
| Sulfur Dioxide | 0.5 lbs/hr | 1.2 tons/yr |
| Nitrogen Oxides | 142 ppmvd at 15% O ₂ | |
| Nitrogen Oxides (as NO ₂) | 26.2 lbs/hr | 78.4 tons/yr |
| Carbon Monoxide | 4.7 lbs/hr | 14.0 tons/yr |
| Volatile Organic Compounds | 0.2 lbs/hr | 0.5 tons/yr |

These emissions are derived from the actual turbine energy output in hp-hrs and DEQ approved pollutant-specific emission factors and equations. 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 Condition 17. (9 VAC 5-80-110, 40 CFR 60.332(a)(2), and Condition 14 of 09/24/09 Permit)

19. **Fuel Burning Equipment Requirements – (Emission Unit 06009) – Limitations** – Visible emissions from the turbine (Emission Unit 06009) exhaust stack shall not exceed five percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).
(9 VAC 5-80-110 and Condition 16 of 09/24/09 Permit)

20. **Fuel Burning Equipment Requirements – (Emission Units 06009) – Limitations** – Except where this permit is more restrictive than the applicable requirement, the turbine (Emission Unit 06009) shall be operated in compliance with the requirements of 40 CFR 60, Subpart GG.
(9 VAC 5-80-110 and Condition 12 of 09/24/09 Permit)

21. **Fuel Burning Equipment Requirements – (Emission Units 06009) – Monitoring** – Fuel monitoring for sulfur content as specified by NSPS Subpart GG can be waived provided fuel combusted in the turbine is demonstrated to meet the definition of natural gas as follows:
- The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or

- b. Representative fuel sampling data shows that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 is required.

(9 VAC 5-50-410 and 9 VAC 5-80-110)

- 22. Fuel Burning Equipment Requirements – (Emission Unit 06009) – Testing** – The permittee shall measure the concentration of nitrogen oxides (NO_x), carbon monoxide (CO), and oxygen (O₂) in the exhaust gas stream from the Solar Centaur T-4500 gas turbine at least once every six month period. NO_x emissions shall represent the combined measured emissions of NO and NO₂, and shall be reported collectively as NO₂. NO_x emissions shall be reported in units of parts per million, dry volume, corrected to 15 percent O₂ and pounds of NO_x per hour (as NO₂). CO emissions shall be reported in units of parts per million, dry volume, corrected to 15 percent O₂, and pounds of CO per hour. The testing shall be conducted using test methods and procedures approved in advance by DEQ. The details of the tests are to be arranged with the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-80-110 E)

- 23. Fuel Burning Equipment Requirements – (Emission Unit 06009) – Testing** –The permittee shall document all process parameters necessary to determine turbine performance with respect to the emission limits and standards of this permit during the periodic emissions testing on each turbine conducted in accordance with Condition 22. At a minimum, the following process parameters shall be monitored and recorded for each test:
- a. the work performed by the turbine tested, measured or reported in horsepower (hp);
 - b. the average exhaust gas volumetric flowrate per stack;
 - c. the amount of fuel consumed by the turbine during the emissions measurement;
 - d. other information necessary to determine emission factors for the turbine; and
 - e. the actual duration of the measurement.

(9 VAC 5-80-110 E)

- 24. Fuel Burning Equipment Requirements – (Emission Unit 06009) – Testing** – As determined in accordance with Conditions 22, if the measured emission rate of NO_x or CO exceeds the emission standard for the respective pollutant, the permittee shall:
- a. Verify that the turbine is operating according to manufacturer's specifications, or other predetermined site-specific acceptable operating conditions. If a turbine is not operating properly, the permittee shall take corrective action immediately to reduce emissions to or below the emission standard. The permittee shall document pollutant emission rates within one week of applying corrective action to a turbine by measuring the concentration of pollutant(s) in the turbine exhaust gases. The measurement shall be conducted in accordance with procedures in either Condition 22 of this permit, or other procedures approved in advance by the Regional Air Compliance Manager of the DEQ's NRO.

- b. If the corrective action in Condition 24.a above does not rectify the emission excursion, the permittee shall conduct a compliance test for the specific pollutant(s) of concern within 30 days of completing the corrective action on the turbine. The compliance testing shall be conducted in accordance with approved EPA reference methods as presented in Condition 46 of this permit, or other procedures approved in advance by the Regional Air Compliance Manager of the DEQ's NRO.

(9 VAC 5-80-110 E)

Fuel Burning Equipment Requirements – (Emission Unit 060G1)

25. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The NO_x emissions from the emergency engine driven generator shall be controlled by maintaining and operating the engine under a "best power" air to fuel (A/F) ratio setting. A "best power" A/F ratio setting for the engine shall be defined as proper adjustment of the engine mounted gas regulator, while under full load operation, such that a pressure differential of 10 to 12 inches of water is observed between the carburetor fuel inlet pipe and the carburetor air horn. The "best power" operation of the engine shall be maintained by periodic A/F ratio adjustment of the gas regulator at a frequency of no less than once between April 1 and June 30 of each calendar year.
(9 VAC 5-80-110 and Condition 3 of 09/24/09 Permit)

26. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The emergency engine driven generator (Emission Unit 060G1) shall not operate more than 1000 hours per year, calculated as the sum of each consecutive twelve month period. See Condition 43.l for method of determining compliance with this requirement.
(9 VAC 5-80-110 and Condition 5 of 09/24/09 Permit)

27. Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations:

- a. Emergency / Critical Power Generation:

- (1) **Emergency:** The emergency engine driven generator (Emission Unit 060G1) may be operated in emergency 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 be allowed for the period of time the primary electrical power provider service is unavailable. Once primary electrical power provider service is available the engine-generator (Emission Unit 060G1) may be operated in accordance with Critical Power Generation as defined below.
- (2) **ISO-Declared Emergency:** The emergency engine driven generator (Emission Unit 060G1) may be operated for participation in an Independent System Operator's (ISO) Emergency Load Response Program (ELRP) during times of an ISO-declared emergency, as defined in the ISO's emergency operations manual. Operations under this scenario shall not exceed 60 hours per generator each calendar year.

(3) Critical Power Generation: The emergency engine driven generator (Emission Unit 060G1) may be operated in situations where immediate action on the part of the facility is needed due to a loss or anticipated loss of acceptable electrical power service from the primary provider and the loss or anticipated loss of power service is beyond the reasonable control of the facility. Operation under these circumstances shall be allowed until such time as acceptable power provider service is restored or the loss of acceptable power provider service is no longer reasonably anticipated.

- b. The emergency engine driven generator (Emission Unit 060G1) may also be operated for periodic maintenance, testing, and operational training.
- c. Except as provided in Conditions 27.a and 27.b, a change in the method of operation may require a permit to modify and operate.
- d. Total emissions for any twelve month period, calculated as the sum of all emissions from operations under scenarios in Conditions 27.a and 27.b above, shall not exceed the limits stated in Condition 31.

(9 VAC 5-80-110 and Condition 6 of 09/24/09 Permit)

28. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The approved fuel for the emergency engine-driven generator (Emission Unit 060G1) is natural gas. A change in the fuel may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 7 of 09/24/09 Permit)

29. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The natural gas shall meet the specifications below:

NATURAL GAS:

Minimum heat content: 950 Btu/cf HHV as determined by ASTM D1826, D2382, or a Department of Environmental Quality (DEQ) approved equivalent method.

Sulfur Content: The maximum sulfur content of the natural gas to be burned in the natural gas engine shall not exceed 20 grains per 100 dry standard cubic feet. The annual average sulfur content of the natural gas to be burned in the engine shall not exceed 3 grains per 100 dry standard cubic feet per year.

(9 VAC 5-80-110 and Condition 8 of 09/24/09 Permit)

30. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The emergency engine driven generator (Emission Unit 060G1) shall consume no more than 1.91×10^6 cubic feet of natural gas per year, calculated as the sum of each consecutive twelve month period. See Condition 43.I for method of determining compliance with this requirement.

(9 VAC 5-80-110 and Condition 11 of 09/24/09 Permit)

31. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations –** Emissions from the operation of the emergency engine driven generator (Emission Unit 060G1) shall not exceed the limits specified below:

Nitrogen Oxides 3.9 lbs/hr 2.0 tons/yr
(as NO₂)

Carbon Monoxide 14.9 lbs/hr 7.5 tons/yr

Annual emissions shall be calculated monthly as the sum of each consecutive twelve month period using actual engine energy output in hp-hrs (derived from hours of operation at maximum rated horsepower) and DEQ approved pollutant-specific emission factors and equations.

(9 VAC 5-80-110 and Condition 15 of 09/24/09 Permit)

32. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations –** Visible emissions from the emergency engine driven generator (Emission Unit 060G1) shall not exceed five percent opacity as determined by EPA Method 9 (Reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown and malfunction.

(9 VAC 5-80-110 and Condition 17 of 09/24/09 Permit)

33. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations –** The permittee shall operate the emergency engine driven generator (Emission Unit 060G1) according to requirements in paragraphs 40 CFR 63.6640(f)(2) through (4). In order for the emergency engine driven generator to be considered an emergency stationary reciprocating internal combustion engine (RICE) under 40 CFR 63, Subpart ZZZZ, the emergency engine driven generator may only be operated for emergency purposes and for non-emergency purposes specified in Conditions 33.a. and 33.b. If the permittee operates the engine for non-emergency purposes other than those listed in Conditions 33.a. and 33.b., the engine will be considered to be a non-emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.

- a. The permittee may operate the emergency stationary RICE for any combination of the purposes specified below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by item (b) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph and 40 CFR 63.6640 (f)(2).

- (1) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent, balancing authority, and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(2) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(3) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

- b. Emergency stationary RICE located at an area source of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of 40 CFR 63.6640. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(9 VAC 5-80-110 and 40 CFR 63.6640(f))

34. Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations – The permittee shall conduct the following activities on the emergency engine driven generator (Emission Unit 060G1):

- a. Change oil and filter every 500 hours of operation or annually, whichever comes first.
- b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary.
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(9 VAC 5-80-110 and 40 CFR 63.6603 (a))

35. Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations – The permittee shall:

- a. Operate and maintain the emergency engine driven generator (Emission Unit 060G1) according to the manufacturer's emission-related operation and maintenance instructions; or
- b. Develop and follow the permittee's own maintenance plan which must provide, to the extent practicable, for the maintenance and operation of the emergency engine driven generator (Emission Unit 060G1) in a manner consistent with good air pollution control practice for minimizing emissions.

(9 VAC 5-80-110, 40 CFR 63.6625(e), and 40 CFR 63.6640(a))

36. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** – The emergency engine driven generator (Emission Unit 060G1) shall be equipped with a non-resettable hour meter.
(9 VAC 5-80-110 and 40 CFR 63.6625(f))
37. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Limitations** –The emergency engine driven generator (Emission Unit 060G1) shall be operated in a manner that minimizes the engine's time spent at idle during startup and minimizes the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d of 40 CFR 63 Subpart ZZZZ that apply.
(9 VAC 5-80-110 and 40 CFR 63.6625(h))
38. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Notifications** – The permittee shall meet the applicable notification requirements in §63.6645 and in 40 CFR 63, Subpart A.
(9 VAC 5-80-110 and 40 CFR 63.6595(c))
39. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Reporting** – The permittee shall submit the compliance report for the emergency engine driven generator (Emission Unit 060G1) as applicable in 40 CFR 63 Subpart ZZZZ Table 7 per §63.6650(a). The report shall contain the information required by Table 7, §63.6650(h) and (f), and submitted per the schedule required by §63.6650(b). Copies of the compliance reports shall be submitted to the Regional Air Compliance Manager of the DEQ's NRO.
(9 VAC 5-80-110 and 40 CFR 63.6650)
40. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – General Provisions** – The permittee shall comply with the applicable requirements of General Provisions in §63.1 through 63.15 as identified in 40 CFR 63 Subpart ZZZZ Table 8.
(9 VAC 5-80-110 and 40 CFR Part 63.6665)
41. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Recordkeeping** – The permittee shall keep the applicable records as required in §63.6655 including those required in 40 CFR 63 Subpart ZZZZ Table 6 that demonstrate continuous compliance with each applicable limitation of 40 CFR 63 Subpart ZZZZ.
(9 VAC 5-80-110 and 40 CFR Subpart ZZZZ, §§63.6655 (e) and (f))
42. **Fuel Burning Equipment Requirements – (Emission Unit 060G1) – Monitoring** – A differential pressure gauge with the appropriate fittings to connect between the engine's carburetor fuel inlet pipe and the carburetor air horn shall be kept onsite at all times.
(9 VAC 5-80-110 and Condition 18 of 09/24/09 Permit)

Facility Wide Conditions

43. **Facility Wide Conditions – Recordkeeping** – The permittee 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 Regional Air Compliance Manager of the DEQ's NRO:

These records shall include, but are not limited to:

- a. The annual hours of operation of each turbine (Emission Units 06001 through 06009), calculated monthly as the sum of each consecutive twelve-month period;
- b. The annual fuel consumption (in cubic feet) for each turbine (Emission Units 06001 through 06009), calculated monthly as the sum of each consecutive twelve-month period;
- c. The annual energy output for each turbine (Emission Units 06001 through 06009) in hp-hrs, calculated monthly as the sum of each consecutive twelve-month period;
- d. Annual hours of operation of the emergency engine driven generator (Emission Unit 060G1), calculated monthly as the sum of each consecutive twelve month period;
- e. Annual consumption of natural gas for the emergency engine driven generator (Emission Unit 060G1), calculated monthly as the sum of each consecutive twelve month period;
- f. Monthly emissions calculations, including equations and emission factors, using calculation methods approved by the Regional Air Compliance Manager of the DEQ's NRO to verify compliance with the emissions limitations in Conditions 6, 18, and 31;
- g. Written operating procedures for maintaining the engine at a "best power" A/F ratio setting. Operators shall be trained in the proper operation of all such equipment and shall be familiar with the written operating procedures;
- h. A log of the periodic A/F ratio adjustments and differential pressure readings to demonstrate compliance with Condition 25 of this permit;
- i. One of the following sources of information to demonstrate compliance with the natural gas sulfur content limit:
 - (1) a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying the maximum total sulfur content of the fuel; or
 - (2) Representative fuel sampling data which show the sulfur content of the gaseous fuel;
- j. Scheduled and unscheduled maintenance and operator training in accordance with Condition 44;

- k. Results of all stack tests, visible emissions evaluations, performance evaluations, and periodic monitoring measurements;
- l. Compliance for the consecutive twelve-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 eleven month.

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

(9 VAC 5-80-110 and Condition 22 of 09/24/09 Permit)

44. Facility Wide Conditions – Recordkeeping – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. The permittee shall take the following measures in order to minimize the duration and frequency of excess emissions with respect to turbines (Emission Units 06001-06009) and the emergency engine driven generator (Emission Unit 060G1):

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

(9 VAC 5-80-110 and Condition 26 of 09/24/09 Permit)

45. Facility Wide Conditions – Testing – The permitted facility shall be modified so as to allow for emissions testing at any time using appropriate methods. Upon request from the DEQ, test ports will be provided at the appropriate locations.

(9 VAC 5-80-110 and Condition 21 of 09/24/09 Permit)

46. Facility Wide Conditions – Testing – If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following test methods in accordance with procedures approved by the DEQ as follows:

Table 2. Emission Test Methods

| Pollutant | Test Method (40 CFR Part 60, Appendix A) |
|------------------|---|
| NOx | EPA Method 20, 7, 7E |
| SO ₂ | EPA Method 6, 6A, 6C |
| CO | EPA Method 10 |
| VOC | EPA Methods 18, 25, 25A |
| Visible Emission | EPA Method 9 |

(9 VAC 5-80-110 and Conditions 19 and 20 of 09/24/09 Permit)

47. **Facility Wide Conditions – Testing** – Reporting of emission excursions above an applicable emission standard shall be conducted in accordance with the permit deviation reporting procedures in Condition 62. In addition, two copies of the test results from any compliance testing performed as a result of an emissions excursion shall be provided to the Regional Air Compliance Manager of the DEQ’s NRO within thirty days of conducting the test. All DEQ correspondence concerning this permit should be submitted to the following address:

Regional Air Compliance Manager
Department of Environmental Quality
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

(9 VAC 5-80-110)

48. **Facility Wide Conditions – Reporting** – The general requirements and procedures set forth in Conditions 58 through 63 of this permit shall be followed with respect to reporting requirements for the fuel burning equipment listed in Table 1 of this permit.
(9 VAC 5-80-110)

Insignificant Emission Units

49. The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Table 3. Insignificant Emission Units

| Emission Unit No. | Emission Unit Description | Citation ¹ | Pollutant Emitted (9VAC5-80-720 B) | Rated Capacity (9VAC5-80-720 C) |
|-------------------|--|-----------------------|------------------------------------|---------------------------------|
| A01 | Lube Oil Tank 1,000 gallon | 9 VAC 5-80-720 B | VOC | --- |
| A02 | Water Mixture Tank #1 1,000 gallon (Wastewater) | 9 VAC 5-80-720 B | VOC | --- |
| A03 | Used Oil Tank 1,000 gallon | 9 VAC 5-80-720 B | VOC | --- |
| A04 | Pipeline Liquid Tank 1,000 gallon | 9 VAC 5-80-720 B | VOC | --- |
| B01 | Water Mixture Tank #2 1,000 gallon (Wastewater) | 9 VAC 5-80-720 B | VOC | --- |
| BLR2 | Boiler #2, Natural Gas-fired Heating System Boiler | 9 VAC 5-80-720 C | --- | 1 MMBtu/hr |

¹The citation criteria for insignificant activities are as follows:
9 VAC 5-80-720 A – Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B – Insignificant due to emission levels

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield and Inapplicable Requirements

50. **Permit Shield and 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:

Table 4. Requirements Not Applicable to this Permitted Facility

| Citation | Title of Citation | Description of Applicability |
|---------------------------------------|--|--|
| 40 CFR 60, Subpart GG 60.334(h)(2) | New Source Performance Standards-Standards of Performance for Stationary Gas Turbine | The nitrogen monitoring is not required because the facility is not claiming fuel bound nitrogen allowance as part of the facility's emission limit. |
| 40 CFR 60, Subpart KKKK 60.4305(a) | Standards of Performance for Stationary Combustion Turbines | The turbines were modified and/or constructed prior to February 18, 2005. |

Nothing in this permit shield shall alter the provisions of § 303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to § 114 of the federal Clean Air Act, (ii) the Board pursuant to § 10.1-1314 or § 10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to § 10.1-1307.3 of the Virginia Air Pollution Control Law.
(9 VAC 5-80-140)

General Conditions

51. **General Conditions – Federal Enforceability – All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.**
(9 VAC 5-80-110 N)
52. **General Conditions – Permit Expiration – This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.**
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)
53. **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 5-80-110 D and 9 VAC 5-80-80 F)
54. **General Conditions – Permit Expiration – If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.**
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)
55. **General Conditions – Permit Expiration – No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.**
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)
56. **General Conditions – Permit Expiration – If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.**
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)
57. **General Conditions – Permit Expiration – The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.**
(9 VAC 5-80-110 D and 9 VAC 5-80-80 F)

58. **General Conditions – Recordkeeping and Reporting** – General Conditions 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.
- e. The analytical techniques or methods used.
- f. The results of such analyses.
- g. The operating conditions existing at the time of sampling or measurement.

(9 VAC 5-80-110 F)

59. **General Conditions – Recordkeeping and Reporting** – Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

(9 VAC 5-80-110 F)

60. **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 5-80-80 G, and shall include:

- a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31; and
- b. All deviations from permit requirements. For purposes 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 which indicates an exceedance of emission limitations or operational restrictions; or
 - (3) failure to meet monitoring, record-keeping, or reporting requirements contained in this permit.

- c. If there were no deviations from the 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)

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

- a. The time period included in the certification. The time period to be addressed is January 1 to December 31;
- b. The identification of each term or condition of the permit that is the basis of the certification;
- c. The compliance status;
- d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance;
- e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period;
- f. Such other facts as the permit may require to determine the compliance status of the source; and
- g. One copy of the annual compliance certification shall be sent to EPA at the following address:

R3_APD_Permits@epa.gov

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

62. **General Conditions – Permit Deviation Reporting** – The permittee shall notify the Regional Air Compliance Manager of the DEQ’s NRO, within four daytime business hours 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 fourteen days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventive 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 Condition 60 of this permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

63. **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 Regional Air Compliance Manager of the DEQ’s NRO by facsimile transmission, telephone, telegraph, or email of such failure or malfunction and shall within fourteen 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 Regional Air Compliance Manager of the DEQ’s NRO.
(9 VAC 5-20-180 C)
64. **General Conditions – Severability** – The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)
65. **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 grounds 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)
66. **General Conditions – Need To Halt or Reduce Activity Not a Defense** – It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)
67. **General Conditions – Permit Modifications** – 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)
68. **General Conditions – Property Rights** – The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

69. **General Conditions – Duty To Submit Information** The permittee shall furnish to the board, within a reasonable time, any information that the board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)
70. **General Conditions – Duty To Submit Information** – Any document (including reports) required in a permit condition to be submitted to the board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.
(9 VAC 5-80-110 K.1)
71. **General Conditions – Duty To Pay Permit Fees** – The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350 in addition to an annual permit maintenance fee consistent with the requirements of 9 VAC 5-80-2310 through 9 VAC 5-80-2350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. The amount of the annual permit maintenance fee shall be the largest applicable base permit maintenance fee amount from Table 8-11A in 9 VAC 5-80-2340, adjusted annually by the change in the Consumer Price Index.
(9 VAC 5-80-110 H, 9 VAC 5-80-340 C and 9 VAC 5-80-2340 B)
72. **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, oil, 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 other 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 traced dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

73. **General Conditions – Startup, Shutdown And Malfunction** – At all times, including periods of startup, shutdown, 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)

74. **General Conditions – Alternative Operating Scenarios** – Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80 Article 1.

(9 VAC 5-80-110 J)

75. **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 5-80-110 K.2)

76. **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 or more years. Such a reopening shall be completed not later than eighteen 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.

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

77. **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 5-80-150 E)
78. **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 5-80-160)
79. **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 thirty days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
80. **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 thirty days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)
81. **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 of Condition 82 are met.
(9 VAC 5-80-250)
82. **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 5-80-110 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.

(9 VAC 5-80-250)

83. **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 5-80-250)
84. **General Conditions – Malfunction As An Affirmative Defense** – The provisions of Conditions 81 through 84 are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
(9 VAC 5-80-250)
85. **General Conditions – Permit Revocation Or Termination For Cause** – A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the 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)
86. **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 5-80-80 E)

87. **General Conditions – Stratospheric Ozone Protection** – If the permittee handles or emits one or more Class I or II substance 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)
88. **General Conditions – Asbestos Requirements** – The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).
(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
89. **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 under 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.
(40 CFR Part 68)
90. **General Conditions – Changes to Permits for Emissions Trading** – No permit revision shall be required, under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.
(9 VAC 5-80-110 I)
91. **General Conditions – Emissions Trading** – Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
- a. All terms and conditions required under 9 VAC 5-80-110 except subsection N shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.
- (9 VAC 5-80-110 I)