# COMMONWEALTH of VIRGINIA

*DEPARTMENT OF ENVIRONMENTAL QUALITY*

**Virginia Title V Operating Permit**

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: | Valley Proteins, Inc. |
| Facility Name: | Valley Proteins, Inc. - Winchester |
| Facility Location: | 1635 Indian Hollow Road<br>Winchester, VA 22603 |
| Registration Number: | 80092 |
| Permit Number: | VRO80092 |

November 1, 2004
Effective Date

October 31, 2009
Expiration Date

Director, Department of Environmental Quality

October 29, 2004
Signature Date

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## I. Facility Information

**Permittee**
Valley Proteins, Inc.
151 Val-Pro Road
P.O. Box 3588
Winchester, VA 22604

**Responsible Official**
Robert Golightly
Plant Manager

**Facility**
Valley Proteins, Inc.
1635 Indian Hollow Road
Winchester, VA 22603

**Contact Person**
Thomas A. Gibson, Jr.
Director of Environmental Affairs
(540) 877-2590

**Plant Identification Number:** 51-069-0011

**Facility Description:** SIC Code: 2077 – Rendering of animal by-products and fats and NAISC: 31163 - Rendering and Meat Byproduct Processing

Valley Proteins, Inc. (VP) renders inedible animal by-products and used cooking oil from restaurants to produce protein solids and fats that are sold to feed mills. One 25.0 ton/hr continuous cooker and two 1.75 ton/hr feather cookers breakdown and dehydrate raw animal materials and used cooking oil into solids and fats using steam from two residual and finished animal/vegetable oil-fired boilers. Odor vapor streams containing volatile organic compounds (VOCs) are vented to the boiler firebox for incineration or to the packed tower scrubbers. Room air from the facility is directed to a 66,000 cfm cross-flow scrubber. Fats and solids are stored in fat tanks and feed bins, respectively. The processed animal/vegetable oil may be used as a fuel for the boilers, depending on market and availability. The facility is also capable of storing up to 333,500 gallons of fuel oil and gasoline for use in the boilers and transportation trucks.

## II. Emission Units

Equipment to be operated consists of:

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity | Pollution Control Device Description (PCD) | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---|---|---|---|---|---|---|---|
| **Fuel Burning Equipment** | | | | | | | |
| B-1 | B1E-1 | Cleaver Brooks CB655-700 boiler, manufactured in 1967 (modified in 2002) | 23.4 MMBtu/hr maximum heat input | --- | --- | --- | 8/19/04 |
| B-2 | B2E-1 | Cleaver Brooks CB662-700 boiler, manufactured in 1967 (modified in 2002) | 23.4 MMBtu/hr maximum heat input | --- | --- | --- | 8/19/04 |
| **Cookers** | | | | | | | |
| CC-1 | B1E-1<br>B2E-2<br>PTSE-1<br>PTSE-2<br>CFS-1 | 320U Dupps continuous cooker equipped with two air cooled condensers (cooker manufactured in 2002) | 25.0 tons/hr maximum solids input | 6000 cfm Venturi Scrubber<br>6000 cfm Packed Tower Scrubber<br>3000 cfm Venturi Scrubber<br>3000 cfm Packed Tower Scrubber<br>Cross Flow Scrubber | VS-1<br>PTS-2<br>VS<br>PTS-1<br>CFS-1 | VOC and PM | 8/19/04 |
| FC-1, FC-2 | B1E-1<br>B2E-2<br>PTSE-1<br>PTSE-2<br>CFS-1 | Dupps 5x12 feather cookers (manufactured prior to 1972) | 1.75 tons/hr maximum combined solids input | 6000 cfm Venturi Scrubber<br>6000 cfm Packed Tower Scrubber<br>3000 cfm Venturi Scrubber<br>3000 cfm Packed Tower Scrubber<br>Cross Flow Scrubber | VS-1<br>PTS-2<br>VS<br>PTS-1<br>CFS-1 | VOC and PM | 8/19/04 |

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

## III. Fuel Burning Equipment Requirements – (Units B-1 and B-2)

### A. Limitations

1. The approved fuels for the two Cleaver Brooks boilers (B-1 and B-2) are residual oil (No. 6) and processed animal fat. A change in fuels may require a permit to modify and operate.
(9 VAC 5-80-110 and Condition 3 of the 8/19/04 Permit)

2. The fuel throughput to the two Cleaver Brooks boilers (B-1 and B-2) shall not exceed the lesser of the following:

   - 2.17 million gallons per year of processed animal fat and residual oil, combined, calculated monthly as the sum of each consecutive 12-month period; or

   - the annual fuel throughput (in gallons) calculated by the following equation:

$$TF = 1{,}974{,}522.3 \div \%S$$

.....Equation III-1

Where:
%S = The percent sulfur content of the fuel.
TF = The annual throughput of fuel (in gallons).

The annual fuel throughput shall be calculated monthly as the sum of each consecutive 12-month period.
(9 VAC 5-80-110 and Condition 4 of the 8/19/04 Permit)

3. The residual oil and processed animal fat shall meet the specifications below:

RESIDUAL OIL which meets ASTM specifications for number 6 fuel oil:
Maximum sulfur content per shipment: 2.5%

PROCESSED ANIMAL FATS derived from Valley Proteins, Inc. rendering operations.

(9 VAC 5-80-110 and Condition 5 of the 8/19/04 Permit)

4. Boiler emissions shall be controlled by proper operation and maintenance of combustion equipment. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.
(9 VAC 5-80-110 and Condition 7 of the 8/19/04 Permit)

5. Hourly emissions from the operation of each of the two Cleaver Brooks boilers (B-1 and B-2) when burning processed animal fat shall not exceed the limits specified below:

| | |
|---|---|
| Particulate Matter | 0.40 lbs/hr |
| PM-10 | 0.40 lbs/hr |
| Nitrogen Dioxide | 7.57 lbs/hr |
| Carbon Monoxide | 0.70 lbs/hr |
| Volatile Organic Compounds | 0.36 lbs/hr |

(9 VAC 5-80-110 and Condition 8 of the 8/19/04 Permit)

6. Hourly emissions from the operation of each of the two Cleaver Brooks boilers (B-1 and B-2) when burning residual oil (No. 6) shall not exceed the limits specified below:

| | |
|---|---|
| Particulate Matter | 4.09 lbs/hr |
| PM-10 | 3.56 lbs/hr |
| Sulfur Dioxide | 61.23 lbs/hr |
| Nitrogen Dioxide | 8.58 lbs/hr |
| Carbon Monoxide | 0.78 lbs/hr |

(9 VAC 5-80-110 and Condition 9 of the 8/19/04 Permit)

7. Total annual emissions from the operation of the two Cleaver Brooks boilers (B-1 and B-2) when burning processed animal fat or residual oil shall not exceed the limits specified below:

| | |
|---|---|
| Particulate Matter | 12.25 tons/yr |
| PM-10 | 10.54 tons/yr |
| Sulfur Dioxide | 155.00 tons/yr |
| Nitrogen Dioxide | 59.68 tons/yr |
| Carbon Monoxide | 5.43 tons/yr |

Volatile Organic Compounds 1.95 tons/yr

(9 VAC 5-80-110 and Condition 10 of the 8/19/04 Permit)

8. Visible emissions from each of the two Cleaver Brooks boilers (B-1 and B-2) shall not exceed 20 percent opacity when burning residual oil except during one six-minute period in any one hour in which visible emissions shall not exceed 30 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, or malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 11 of the 8/19/04 Permit)

9. Visible emissions from each of the two Cleaver Brooks boilers (B-1 and B-2) shall not exceed 10 percent opacity when burning processed animal fat except during one six-minute period in any one hour in which visible emissions shall not exceed 20 percent opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
(9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 12 of the 8/19/04 Permit)

**B. Monitoring and Recordkeeping**

1. The permittee shall obtain a certification from the fuel supplier, including sampling and analysis representative of each shipment of residual oil. Each fuel supplier certification shall include the following:

   a. The name of the fuel supplier,

   b. The date on which the residual oil was received,

   c. The volume of residual oil delivered in the shipment,

   d. The sulfur content of the residual oil, and

   e. A statement that the residual oil complies with the American Society for Testing and Materials specifications for number 6 fuel oil.

   (9 VAC 5-80-110 and Condition 6 of the 8/19/04 Permit)

2. Total emissions ($Q_{total}$) of each pollutant from the two Cleaver Brooks boilers (B-1 and B-2) shall be calculated as follows:

$$Q_{total} = \sum_{i=1}^{n} QF_i + \sum_{i=1}^{n} QR_i$$

.....Equation III-2

Where:

$Q_{total}$ = Total pollutant emission rate (in tons) from all boilers.

$QF_i$ = Total pollutant emission rate (in tons) from each boiler (i) burning processed animal fat using DEQ-approved pollutant specific emission factors.

$QR_i$ = Total pollutant emission rate (in tons) from each boiler (i) burning residual oil using DEQ-approved pollutant specific emission factors.

The emissions shall be calculated monthly as the sum of each consecutive 12-month period to verify compliance with the annual emission limits included in Condition III.A.8.
(9 VAC 5-80-110 and Condition 26 of the 8/19/04 Permit)

3. The DEQ-approved emission factors to be used in the calculation of emissions from the two Cleaver Brooks boilers (B-1 and B-2) are as follows:

| Fuel Type | Higher Heating Value (BTU/gallon) | Pollutant | Emission Factor | Emission Factor Units |
|---|---|---|---|---|
| Processed Animal Fat | 141,000 | PM | 2.0 | lbs/$10^3$ gallons |
| | | PM-10 | 2.0 | |
| | | NOX | 38.0 | |
| | | CO | 0.45 | |
| | | VOC | 1.8 | |
| No. 6 Residual Oil | 150,000 | PM | 9.19*S(1) +3.22 | lbs/$10^3$ gallons |
| | | PM-10 | 8.03*S +2.65 | |
| | | SO2 | 157*S | |
| | | NOX | 55 | |
| | | CO | 5 | |
| | | VOC | 0.28 | |

(1) % sulfur content in fuel

(9 VAC 5-80-110 and Condition 27 of the 8/19/04 Permit)

4. The permittee shall perform periodic monitoring of the boiler stacks (B1E-1 and B1E-2) as follows:

   a. Conduct weekly inspections of each stack to determine the presence of visible emissions. The person conducting the inspection does not have to be EPA, Method 9 certified. However, the individual should be familiar with the procedures of EPA, Method 9 including using the proper location to observe visible emissions. If during the inspection, visible emissions are observed, the permittee shall take one of the following actions:

(1) Timely corrective action shall be initiated within 4 hours of the inspection such that the stack operates with no visible emissions within 24 hours of the initial observation; or

(2) An EPA Method 9 (40 CFR Part 60, Appendix A) visible emission evaluation (VEE) shall be conducted. If a VEE is conducted, the individual performing the VEE must hold a current EPA Method 9 certification. The VEE shall be conducted for a minimum period of six minutes. If any of the observations exceed the applicable opacity limit, the observation period shall continue until 60 minutes of observation have been completed or until a violation of the opacity limit for that stack has been documented, whichever period is shorter.

b. If the results of any VEE, while burning residual oil, exceed the standard in Condition III.A.8, a performance test shall be conducted for particulate matter (PM) on the boiler stack which exceeded the standard using EPA Methods 5 and 202 (40 CFR Part 60, Appendix A). The tests shall be performed while burning residual oil, and demonstrate compliance with the PM emission limit contained in Condition III.A.6 within 90 days of the exceedance of the opacity standard or within one calendar year of the previous stack test of that boiler stack whichever occurs later. The details of the test are to be arranged with the Director, Valley Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Regional Office, within 45 days after test completion and shall conform to the test report format enclosed with this permit.

c. If the results of any VEE, while burning processed animal fat, exceed the standard in Condition III.A.9, a performance test shall be conducted for particulate matter (PM) on the boiler stack which exceeded the standard using EPA Methods 5 and 202 (40 CFR Part 60, Appendix A). The tests shall be performed, while burning processed animal fat and demonstrate compliance with the emission limit contained in Condition III.A.5 within 90 days of the exceedance of the opacity standard or within one calendar year of the previous stack test of that boiler stack whichever occurs later. The details of the test are to be arranged with the Director, Valley Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Two copies of the test results shall be submitted to the Director, Valley Regional Office, within 45 days after test completion and shall conform to the test report format enclosed with this permit.

(9 VAC 5-80-110)

5. When a performance test is required by Condition III.B.4.b or c., the permittee shall conduct a concurrent VEE, in accordance with 40 CFR, Part 60, Appendix A, Method 9, on the stack being tested. Each test shall consist of 30 sets of 24 consecutive observations (at 15 second intervals) to yield a six minute average. The details of the

tests are to be arranged with the Director, Valley Regional Office. The permittee shall submit a test protocol at least 30 days prior to testing. Should conditions prevent concurrent opacity observations, the Director, Valley Regional Office, shall be notified in writing, within seven days, and visible emissions testing is to be rescheduled within 30 days. Rescheduled testing is to be conducted under the same conditions (as possible) as the performance tests. Two copies of the test result shall be submitted to the Director, Valley Regional Office, within 45 days after test completion and shall conform to the test report format enclosed with this permit. (9 VAC 5-80-110)

6. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:

   a. The monthly and annual throughput of processed animal fat used in the two Cleaver Brooks boilers (B-1 and B-2) in gallons. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

   b. The monthly and annual throughput of residual oil (No. 6) fuel used in the two Cleaver Brooks boilers (B-1 and B-2) in gallons. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

   c. Emissions calculations demonstrating compliance with annual emissions limitations in Condition III.A.8.

   d. Fuel specification test results and certifications including sulfur content and heating value.

   e. A daily log of the type and percent sulfur content of the fuel burned in the two Cleaver Brooks boilers (B-1 and B-2).

   f. A log of weekly inspections performed on the boiler stacks (BE-1 and BE-2) as required in Condition III.B.4 to include the following:

      (1) The date, time and name of the person performing each inspection;

      (2) Whether or not visible emissions are observed and the suspected cause of such emissions;

      (3) The date, time, and type of corrective actions taken.

   g. All visible emission evaluations and stack test results.

h. Scheduled and unscheduled maintenance and operator training.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-80-110 and Condition 28 of the 8/19/04 Permit)

7. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler. These procedures shall be based on the manufacturer's recommendations, at a minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ.
(9 VAC 5-80-110 and Condition 7 of the 8/19/04 Permit)

**C. Testing**

1. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the two Cleaver Brooks boilers (Units B-1 and B-2) when burning processed animal fat to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Valley Regional Office.
(9 VAC 5-80-110 and Condition 25 of the 8/19/04 Permit)

2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

| Pollutant | Test Method (40 CFR Part 60, Appendix A) |
|---|---|
| VOC | EPA Methods 18, 25, 25a |
| $NO_x$ | EPA Method 7 |
| $SO_2$ | EPA Method 6 |
| CO | EPA Method 10 |
| PM/PM-10 | EPA Methods 5, 17, 202 |
| Visible Emission | EPA Method 9 |

(9 VAC –5-80-110)

## IV. Process Equipment Requirements – (Units CC-1, FC-1 and FC-2)

### A. Limitations

1. Particulate matter, volatile organic compounds, and odorous emissions from the processing equipment shall be controlled by wet and chemical scrubbers or incinerated as combustion air in the boilers (B-1 and B-2) as follows:

   a. High Intensity Emissions and Odors

      The following emissions and high intensity odors shall be controlled by a wet 6,000 cfm Venturi scrubber (VS-1) and a 6,000 cfm packed tower scrubber (PTS-2) operated in series:

      – All cooker process equipment including, but not limited to: pressors, screens, sedimentor, and centrifuge.

   b. Non-Condensable Emissions and Odors

      The following emissions and odors shall be <u>incinerated</u> as combustion air in the boilers (B-1 and B-2):

      – The Dupps 320U Continuous Cooker's (CC-1) and feather cookers' (FC-1 and FC-2) non-condensable gases following the condenser units (ACC-250 and ACC-251) and the 3,000 cfm Venturi (VS) scrubber.

      Whenever the boiler(s) is not available, these emissions and odors shall pass through the 3,000 cfm packed tower (PTS-1) scrubber. The bypass of the boilers is permitted <u>only</u> during times when the boilers are operating at a firing load of less than 60%.

   c. Low Intensity Emissions and Odors

      The following low intensity emissions and odors shall be controlled by at least one stage of odor control scrubbing in the cross-flow scrubber (CFS-1).

      - Building process ventilation. All process equipment and raw material and odors from the processing building shall be controlled by one stage of chemical scrubbing.

      (9 VAC 5-80-110 and Condition 13 of the 8/19/04 Permit)

2. A positive oxidation-reduction potential (ORP) shall be maintained at all times when exhaust gases are directed to the scrubbers (PTS-1, PTS-2 and CFS-1).
   (9 VAC 5-80-110 and Condition 14 of the 8/19/04 Permit)

3. The exhaust temperature of the emissions leaving the Venturi scrubbers (VS-1 and VS) shall be maintained below 120°F.
   (9 VAC 5-80-110 and Condition 17 of the 8/19/04 Permit)

4. The total amount of material received for rendering shall not exceed 150,000 tons per year, calculated monthly as the sum of each consecutive 12-month period.
   (9 VAC 5-80-110 and Condition 20 of the 8/19/04 Permit)

5. Total emissions from the scrubbers controlling the rendering process (PTS-1 and PTS-2) shall not exceed the limits specified below:

| | | |
|---|---|---|
| Particulate Matter | 1.35 lbs/hr | 3.56 tons/yr |
| Volatile Organic Compounds | 2.28 lbs/hr | 6.00 tons/yr |

   These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits shall be considered credible evidence of the exceedance of emission limits. Compliance with these limits shall be determined as stated in Conditions IV.A.4 and IV.A.6.
   (9 VAC 5-80-110 and Condition 21 of the 8/19/04 Permit)

6. Visible emissions from the scrubbers (PTS-1, PTS-2 and CFS-1) shall not exceed 10% opacity during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity as determined by EPA Method 9 (reference 40 CFR Part 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.
   (9 VAC 5-80-110, 9 VAC 5-50-80, and Condition 22 of the 8/19/04 Permit)

7. The permittee shall have available written operating procedures for all air pollution control equipment. These procedures shall be based on the manufacturer's recommendations, at a minimum. All air pollution control operators shall be trained and certified in the proper operation of all such equipment. The permittee shall maintain records of the required training and certification. Certification of training shall consist of a statement of time, place, and nature of training provided.
   (9 VAC 5-80-110 and Condition 23 of the 8/19/04 Permit)

**B. Monitoring and Recordkeeping**

1. The packed tower scrubbers (PTS-1 and PTS-2) and the cross-flow scrubber (CFS-1) shall be equipped with devices to continuously measure the oxidation-reduction potential (ORP) of the chlorine dioxide solution used in each of the scrubbers (PTS-1,

PTS-2 and CFS-1). Each monitoring device shall be installed, maintained, calibrated 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 packed tower scrubbers (PTS-1 and PTS-2) and the cross-flow scrubber (CFS-1) are operating.

(9 VAC 5-80-110 and Condition 15 of the 8/19/04 Permit)

2. The monitoring devices used to continuously measure the scrubber ORP shall be observed by the permittee with a frequency of not less than once per day. The permittee shall keep a log of the observations from the packed tower scrubbers (PTS-1 and PTS-2) and the cross-flow scrubber (CFS-1).

   (9 VAC 5-80-110 and Condition 16 of the 8/19/04 Permit)

3. The Venturi scrubbers (VS and VS-1) shall be equipped with devices to continuously measure the scrubber exhaust temperature. Each monitoring device shall be installed, maintained, calibrated 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 Venturi scrubbers (VS and VS-1) are operating.

   (9 VAC 5-80-110 and Condition 18 of the 8/19/04 Permit)

4. The monitoring devices used to continuously measure the Venturi scrubbers' exhaust temperature (VS and VS-1) shall be observed by the permittee with a frequency of not less than once per day. The permittee shall keep a log of the observations from the Venturi scrubbers (VS and VS-1).

   (9 VAC 5-80-110 and Condition 19 of the 8/19/04 Permit)

5. The permittee shall perform daily inspections on each scrubber (PTS-1, PTS-2 and CFS-1) to determine the presence of visible emissions. The person conducting this inspection does not have to be EPA, Method 9 certified. However, the individual should be familiar with the procedures of EPA, Method 9 including using the proper location to observe visible emissions. If during the inspection, visible emissions are observed, a visible emission evaluation (VEE) shall be conducted in accordance with 40 CFR Part 60, Appendix A, EPA Method 9, unless timely corrective action is initiated within two hours of the inspection such that the scrubber operates with no visible emissions within 24 hours of the initial observation. If a VEE is conducted, the individual performing the VEE must hold a current EPA Method 9 certification. The VEE shall be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity standard for the scrubber, the VEE shall be conducted for a total of 60 minutes or until a violation of the opacity standard for the scrubber has been documented, whichever period is shorter.

   (9 VAC 5-80-110)

6. The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:

   a. The monthly and annual throughput of material (in tons) processed by the Dupps 320U Continuous Cooker (CC-1). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

   b. The monthly and annual throughput of material (in tons) processed by the Feather Cookers (FC-1 and FC-2). Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.

   c. A log of all daily monitoring device observations as required by Conditions IV.B.2 and IV.B.4 to include ORP data on each scrubber (PTS-1, PTS-2 and CFS-1) and the exhaust gas temperature from the Venturi scrubber (VS and VS-1).

   d. A log of daily inspections performed on the scrubber (PTS-1, PTS-2 and CFS-1) as required in Condition IV.B.5 to include the following:

      (1) The date, time and name of the person performing each inspection;

      (2) Whether or not visible emissions are observed and the suspected cause of such emissions;

      (3) The date, time, and type of corrective actions taken.

   e. All visible emission evaluations and stack test results.

   f. Scheduled and unscheduled maintenance and operator training.

   These records shall be available for inspection by the DEQ and shall be current for the most recent five years
   (9 VAC 5-80-110 and Condition 28 of the 8/19/04 Permit)

**C. Testing**

1. Upon request by the DEQ, the permittee shall conduct additional performance tests for volatile organic compounds and particulate matter (both filterable and condensable) from the packed tower scrubbers (PTS-1 and PTS-2) to demonstrate compliance with this permit. The details of the tests shall be arranged with the Director, Valley Regional Office.
   (9 VAC 5-80-110 and Condition 24 of the 8/19/04 Permit).

2. Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the scrubbers (PTS-1, PTS-2 and CFS-1) to demonstrate compliance with the visible emission limits contained in this permit. The details of the tests shall be arranged with the Director, Valley Regional Office.

   (9 VAC 5-80-110 and Condition 25 of the 8/19/04 Permit)

3. 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:

| Pollutant | Test Method (40 CFR Part 60, Appendix A) |
|---|---|
| PM/PM-10 | EPA Methods 5, 17, 202 |
| VOC | EPA Methods 25, 26 |
| Visible Emission | EPA Method 9 |

(9 VAC 5-80-110)

## V. Insignificant Emission Units

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

| Emission Unit No. | Emission Unit Description | Citation | Pollutant(s) Emitted (9 VAC 5-80-720 B) | Rated Capacity (9 VAC 5-80-720 C) |
|---|---|---|---|---|
| F-1 | Truck shop furnace (0.4 MMBtu/hr) | 9 VAC 5-80-720 A | - - - | - - - |
| FB-1 to FB-4 | Feed bin storage silos (30 tons each) | 9 VAC 5-80-720 B | PM and PM-10 | - - - |
| FB-5 to FB-7 | Feed bin storage silos (18 tons each) | 9 VAC 5-80-720 B | PM and PM-10 | - - - |
| T-1 | Distillate oil fuel tank (10,000 gals) | 9 VAC 5-80-720 B | VOC | - - - |
| T-2 | Distillate oil fuel tank (2,000 gals) | 9 VAC 5-80-720 B | VOC | - - - |
| T-3 | Distillate oil fuel tank (1,000 gals) | 9 VAC 5-80-720 B | VOC | - - - |
| TG-1 | Gasoline tank (550 gals) | 9 VAC 5-80-720 B | VOC | - - - |
| TB-3 | Residual oil fuel tank (300,000 gals) | 9 VAC 5-80-720 B | VOC | - - - |
| TP-4 | Residual oil fuel tank (20,000 gals) | 9 VAC 5-80-720 B | VOC | - - - |

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

## VI. Permit Shield & Inapplicable Requirements

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

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

## VII. General Conditions

### A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.
(9 VAC 5-80-110 N)

### B. Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless a timely and complete renewal application consistent, with 9 VAC 5-80-80, has been submitted, to the Department, by the owner, the right of the facility to operate shall be terminated upon permit expiration.

1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.

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

4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.

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

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

## C. Recordkeeping and Reporting

1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:

   a. The date, place as defined in the permit, and time of sampling or measurements.

   b. The date(s) analyses were performed.

   c. The company or entity that performed the analyses.

   d. The analytical techniques or methods used.

   e. The results of such analyses.

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

   (9 VAC 5-80-110 F)

2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
   (9 VAC 5-80-110 F)

3. The permittee shall submit the results of monitoring contained in any applicable requirement to 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.

   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, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

**D. Annual Compliance Certification**

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA 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. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

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

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

3. The compliance status.

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

5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.

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

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00)
U. S. Environmental Protection Agency, Region III
1650 Arch Street
Philadelphia, PA 19103-2029.

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

**E. Permit Deviation Reporting**

The permittee shall notify the Director, Valley Regional Office, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3 of this permit.
(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

**F. Failure/Malfunction Reporting**

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the discovery, notify the Director, Valley Regional Office, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within two weeks of the 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, Valley Regional Office.
(9 VAC 5-20-180 C)

**G. Severability**

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.
(9 VAC 5-80-110 G.1)

**H. Duty to Comply**

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is 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)

**I. Need to Halt or Reduce Activity not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
(9 VAC 5-80-110 G.3)

**J. Permit Modification**

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.
(9 VAC 5-80-190 and 9 VAC 5-80-260)

**K. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege.
(9 VAC 5-80-110 G.5)

**L. Duty to Submit Information**

1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
(9 VAC 5-80-110 G.6)

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

**M. Duty to Pay Permit Fees**

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.
(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

## N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;

2. Application of asphalt, 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;

3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,

5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-50-90)

## O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, 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)

## P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described

in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

**Q. Inspection and Entry Requirements**

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.

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

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

4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

**R. Reopening For Cause**

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

**S. Permit Availability**

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.
(9 VAC 5-80-150 E)

**T. Transfer of Permits**

1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
(9 VAC 5-80-160)

2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
(9 VAC 5-80-160)

**U. Malfunction as an Affirmative Defense**

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

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

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

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

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

d. The permittee notified the Board of the malfunction within two working days following the time when the emissions 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, telegraph, or any other method that allows the permittee to comply with the deadline. The notice fulfills the requirement 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 requirements under 9 VAC 5-20-180 C.

3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any requirement applicable to the source.

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

(9 VAC 5-80-250)

**V. Permit Revocation or Termination for Cause**

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe, any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
(9 VAC 5-80-190 C9 VAC 5-80-260)

**W. Duty to Supplement or Correct Application**

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.
(9 VAC 5-80-80 E)

## X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.
(40 CFR Part 82, Subparts A-F)

## Y. 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)

## Z. 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)

## AA. Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

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

2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.

3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)