COMMONWEALTH OF VIRGINIA
Department of Environmental Quality
Valley Regional Office

STATEMENT OF LEGAL AND FACTUAL BASIS

Valley Proteins, Inc.
151 Val-Pro Road
P.O. Box 3588
Winchester, Virginia
Permit No. VRO80092

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Valley Proteins, Inc. has applied for renewal of the Title V Operating Permit for its animal rendering facility in Winchester, Virginia. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: _____ Date: 10/25/04
Patricia A. Buonviri
(540) 574-7823 or (540) 872-3361

Air Permit Manager: _____ Date: 10.29.04
Sharon G. Foley, P.E.

Deputy Regional Director: _____ Date: 10/29/04
Larry M. Simmons, P.E.

Facility Information

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

Responsible Official
Robert D. Golightly
Plant Manager

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

Contact Person
Thomas A. Gibson, Jr.
Director of Environmental Affairs
(804) 634-9475

Plant Identification Number: 51-069-0011

Facility Description: SIC Code 2077 – Rendering of animal by-products and fats,
NAISC 311613 – Rendering & 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 maybe 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.

The facility is a Title V major source of sulfur dioxide (SO_2). This source is located in a recently designated nonattainment area for ozone which is under an Early Action Compact. The facility is located in an attainment area for other pollutants, and has taken limits to become a synthetic minor source for Prevention of Significant Deterioration (PSD) regulations. This facility operates under a minor NSR permit issued on August 19, 2004.

Changes to Existing Title V Permit

The renewal Title V permit for Valley Proteins, Inc. – Winchester Division (VP) incorporates conditions from the minor NSR permit dated June 18, 2003 and amended August 19, 2004 for the installation of a new cooker. Additionally, VP requested a fuel throughput and sulfur dioxide emission limit to become synthetic minor with respect to PSD regulations.

Compliance Status

The facility is inspected once a year. The facility was last inspected on July 21, 2004 and found to be in compliance with all federally enforceable requirements. On December 4, 2003, VP failed a stack test (chlorine emission limit) as required in the State Only section of VP's minor NSR permit issued on June 18, 2003. The Department and VP are currently negotiating a Letter of Agreement and VP is currently meeting their compliance schedule. Since the chlorine limit is not federally enforceable, no compliance plan is required for the Title V permit.

EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

Table 1: Significant Emission Units

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 B2E-2 PTSE-1 PTSE-2 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 6000 cfm Packed Tower Scrubber 3000 cfm Venturi Scrubber 3000 cfm Packed Tower Scrubber Cross Flow Scrubber	VS-1 PTS-2 VS PTS-1 CFS-1	VOC and PM	8/19/04
FC-1, FC-2	B1E-1 B2E-2 PTSE-1 PTSE-2 CFS-1	Dupps 5x12 feather cookers (manufactured prior to 1972)	1.75 tons/hr maximum combined solids input	6000 cfm Venturi Scrubber 6000 cfm Packed Tower Scrubber 3000 cfm Venturi Scrubber 3000 cfm Packed Tower Scrubber Cross Flow Scrubber	VS-1 PTS-2 VS PTS-1 CFS-1	VOC and PM	8/19/04

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

EMISSIONS INVENTORY

A copy of the emission inventory is included as Attachment A. Emissions are summarized in the following table.

Table II. Actual Criteria Pollutant Emissions for the Rendering Facility.

	Criteria Pollutant Emissions (tons/yr)				
	VOC	CO	SO_2	PM-10	NO_x
Rendering (CC-1, FC-1 and FC-2)	3.26			1.93	
Boilers (B-1 and B-2)	0.17	3.05	140.55	8.80	33.50
Total	**3.43**	**3.05**	**140.55**	**10.73**	**33.50**

Insignificant amounts of hazardous air pollutants are emitted from fuel burning and have not been included in the inventory.

EMISSION UNIT APPLICABLE REQUIREMENTS

Fuel Burning Equipment (B-1 and B-2)

Limitations

The following limitations are requirements from the minor NSR permit issued on August 19, 2004. Please note that the condition numbers are from the 2004 permit; a copy of the permit is enclosed as Attachment B.

Condition 3: Approved fuels for the boilers are residual oil and processed animal fat.

Condition 4: Fuel throughput limits for the boilers.

Condition 5: Fuel specification requirements.

Condition 7: Requires proper operations and maintenance of the combustion equipment.

Condition 8: Hourly emissions limits for each boiler when burning processed animal fat.

Condition 9: Hourly emissions limits for each boiler when burning residual oil.

Condition 10: Combined annual emissions limits for the boilers.

Condition 11: Visible emission limit for the boilers when burning residual oil.

Condition 12: Visible emission limit for the boilers when burning processed animal fat.

Periodic Monitoring and Recordkeeping:

The monitoring and recordkeeping requirements in Conditions 6, 26, 27, and 28 of the minor NSR permit dated August 19, 2004 have been modified to meet Part 70 requirements.

The permit requires proper operation of the boiler to comply with the particulate matter and the visible emission requirements for the Cleaver Brooks Boilers.

Opacity has been chosen as a surrogate indicator for particulate matter emissions. The permittee will perform weekly inspections of the boiler stacks to determine the presence of visible emissions. If during the inspection, visible emissions are observed, the permittee has the option of either taking timely corrective action so that the stack operates with no visible emissions (the permittee must initiate corrective action within 4 hours and return to no visible emissions within 24 hours of the inspection) or conducting an EPA Method 9 (40 CFR Part 60, Appendix A) visible emission evaluation (VEE). The VEE will be conducted for a minimum of six minutes. If any of the observations exceed the applicable opacity limit, the observation period will

continue for a total of 60 minutes of observation or until a violation of the opacity standard is recorded.

If the results of the VEE exceed the opacity standard, the permittee is required to do a particulate matter performance test within 90 days of the exceedance. No more than one test per year per boiler is required as long as the performance test results do not exceed the particulate matter emission limit. A concurrent VEE is required with the performance test.

The permittee will monitor the sulfur content of each shipment of residual oil, and will maintain certifications from each fuel supplier to include the name of the fuel supplier, the date the residual oil was received, the volume of residual oil delivered in the shipment, the sulfur content of the residual oil, and a statement certifies the oil meets the specification for number 6 fuel oil.

Hourly emission limits for each boiler were calculated based maximum rated capacity of the boiler and on the emission factors and higher heating values contained in Condition III.B.4 of the permit. Annual emissions are calculated using the equation in Condition III.B.2. As long as the throughput limit is not exceeded (Condition III.A.2), the annual emissions limits should not be exceeded.

The permittee will keep records of monthly and annual throughput of each type of fuel, sulfur content, heating value, emissions calculations demonstrating compliance with annual emissions limitations, daily log of the type and percent sulfur content of the fuel burned in the two boilers, weekly inspection log, results of all VEEs and performance tests, written operating procedures, maintenance schedules for the boilers, and operator and training procedure records.

Compliance Assurance Monitoring (CAM)

Units B-1 and B-2 have no add-on control equipment and are therefore not subject to CAM.

Testing:

The permit requires stack testing for particulate matter if there is a violation of the opacity standard. Additionally, DEQ can request visible emission evaluations on the boilers. A table of test methods has been included in the permit if testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

No specific reporting has been included in the permit for the fuel burning operations.

Streamlined Requirements:

The 10% opacity limit for the boilers when burning processed animal fat is more stringent than the Virginia Administrative Code Standard for visible emissions, 9 VAC 5-50-80. Therefore, only the more stringent opacity limit was included in the permit.

Process Equipment Requirements (CC-1, FC-1 and FC-2)

Limitations:

The following limitations are requirements from the minor NSR permit issued on August 19, 2004. Please note that the condition numbers are from the 2004 permit; a copy of the permit is enclosed as Attachment B.

Condition 13: Requires particulate matter and volatile organic compounds from processing equipment to be controlled by wet and chemical scrubbers or incinerated as combustion air in the boilers.

Condition 14: Requires a positive oxidation-reduction potential (ORP) be maintained at all times when exhaust gases are directed to the scrubbers.

Condition 17: Requires exhaust temperature of the emissions leaving the Venturi scrubbers to be maintained below 120 degrees Fahrenheit.

Condition 20: Rendering throughput limit.

Condition 21: Hourly and annual emissions limits for scrubbers PTS-1 and PTS-2.

Condition 22: Visible emission limit for scrubbers PST-1, PTS-2, and CFS-1.

Condition 23: Requires operating procedures for all air pollution control equipment and for operators to be trained.

Monitoring and Recordkeeping:

The monitoring and recordkeeping requirements in Conditions 15, 16, 18, 19, and 28 of the minor NSR permit dated August 19, 2004 have been modified to meet Part 70 requirements.

Proper operation of the scrubbers and boilers provide reasonable assurance that the particulate matter and volatile organic compound emission and visible emission limits are being met. Proper operation of the boilers is covered in the previous section. Proper operation of the packed tower scrubbers will be monitored by equipping the scrubbers with devices to continuously measure the oxidation-reduction potential of the chlorine dioxide solution used in each of the scrubbers. Additionally, the Venturi scrubbers are equipped with devices to continuously measure the scrubber exhaust temperature. These devices are to be observed and logged by the permittee at least once per day. Additionally, the permittee is required to perform daily inspections on each packed tower scrubbers. The permittee has the option of initiating corrective action to return the stack to no visible emissions or to conduct a visible emission evaluation.

The permittee will keep records of monthly and annual throughput of material processed by the continuous cooker (CC-1) and the feather cookers (FC-1 & FC-2), log of all daily monitoring

device observations (ORP & temperature), daily inspection log, VEE and stack test results, and scheduled and unscheduled maintenance and operator training.

Compliance Assurance Monitoring (CAM)

Although Units CC-1, FC-1 and FC-2 are all controlled by either boiler incineration, Venturi scrubbers or packed tower scrubbers, the control equipment is primarily for odor control. Additionally, since the condensers are considered inherent to the process, uncontrolled particulate and volatile organic compound emissions are less than 100 tons/yr. Therefore, CAM does not apply to these units. See Attachment C.

Testing:

A performance test was conducted for particulate matter, volatile organic compounds, and visible emissions on the packed tower scrubbers (PTS-1 & PTS-2) on December 2 and 3, 2003. Results of the test indicate compliance with the short-term emission limits contained in the permit. Test results are as follows:

Particulate matter (includes condensibles):	0.237 lbs/hr (less than 20% of the emission limit of 1.35 lbs/hr).
Volatile organic compounds:	0.751 lbs/hr (about 1/3 of the emission limit of 2.28 lbs/hr)
Visible Emissions:	No reading greater than 5% opacity for any of the scrubbers.

The permittee may be required to conduct additional performance tests and VEEs if requested by the Virginia DEQ. A table of test methods has been included in the permit if additional testing is performed. The Department and EPA have authority to require testing not included in this permit if necessary to determine compliance with an emission limit or standard.

Reporting:

No specific reporting has been included in the permit for the process operations.

Streamlined Requirements:

The 10% opacity limit for the scrubbers is more stringent than the Virginia Administrative Code Standard for visible emissions, 9 VAC 5-50-80. Therefore, only the more stringent opacity limit was included in the permit.

GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110, that apply to all Federal operating permit sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also

requires notification of deviations from permit requirements or any excess emissions, including those caused by upsets, within one business day.

STATE-ONLY APPLICABLE REQUIRMENTS

Valley Proteins has requested to have all state-only requirements from the minor NSR permit dated August 19, 2004 excluded from the Title V permit. Therefore, the state-only requirements have not been included.

FUTURE APPLICABLE REQUIREMENTS

The facility has not identified any future applicable requirements in the application. This facility is not a major source of HAPS. Therefore, this facility is not subject to any 40 CFR Part 63 NESHAP standards.

INAPPLICABLE REQUIREMENTS

The permittee has not identified any inapplicable requirements in the application. This facility is located in Frederick County, Virginia, an area that has recently been designated as nonattainment for ozone and therefore Reasonably Available Control Technology (RACT) rules now apply. However, no RACT rules were found to apply to this facility.

COMPLIANCE PLAN

Valley Proteins, Inc. - Winchester Division is currently in compliance with all federally enforceable applicable requirements. No compliance plan was included in the application or in the permit

INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the 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.

Insignificant emission units include the following:

Table III. Insignificant Emission Units

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	9 VAC 5-80-720 B	PM and PM-10	- - -

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
	silos (18 tons each)			
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	- - -

[1]The 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
9 VAC 5-80-720 C - Insignificant due to size or production rate

CONFIDENTIAL INFORMATION

Valley Proteins, Inc. did not submit a request for confidentiality. Therefore, all portions of the Title V application are suitable for public review.

PUBLIC PARTICIPATION

A public notice regarding the draft permit was placed in the Winchester Star, Winchester, Virginia, on September 9, 2004. EPA was sent a copy of the draft permit and notified of the public notice on September 8, 2004. The affected states of West Virginia, Pennsylvania and Maryland were sent a copy of the public notice on September 9, 2004. All persons on the Title V mailing list were also sent a copy of the public notice in e-mail dated September 9, 2004.

The public comment period ended on October 9, 2004 with no comments received. The EPA concurrent comment period ended on October 24, 2004 with no comments received.

ATTACHMENT A

CEDS Emission Inventory Report

Registration Number: 80092

County - Plant ID 069-00011

Plant Name: Valley Proteins, Inc.

ROAD MAP REPORT

Inventory Year: 2003

Stack #: 1 Stack 1 Description

Point #: 1 Two Cleaver Brooks boilers (B1 and B2) each rated at 23.4 MMBt/hr

Segment #: 1 No. 6 Fuel Oil

Segment #: 2 Processed Animal Fat

Point #: 20 Two Feather Batch cookers (FC1 and FC2) each rated 1.75 tons/hr

Segment #: 1 Feather batch cookers (FC1 & FC2)

Point #: 22 One Dupps 320U Continous Cooker (CC1) rated at 25.0 tons/hr

Segment #: 1 Continous cooker (CC1)

Registration Number : 80092

County - Plant Id: 069-00011

Plant Name : Valley Proteins, Inc.

POLLUTANT EMISSIONS REPORT (STACK/POINT) (TONS/YEAR)

Parameter List

Pollutant Type: All Pollutants

Years: 2003 - 2003

Inventory Year 2003

Stack #: 1

Point #: 1	CO	NH3	NO2	PM	PM 10	PM 2.5	SO2	VOC
Segment #: 1	3.05	0.49	33.50	10.19	8.80	0.28	140.55	0.17
Segment #: 2	0.00		0.00	0.00	0.00			0.00
	3.05	0.49	33.50	10.19	8.80	0.28	140.55	0.17

Point #: 20	PM	PM 10	VOC
Segment #: 1	0.12	0.12	0.21
	0.12	0.12	0.21

Point #: 22	PM	PM 10	VOC
Segment #: 1	1.81	1.81	3.05
	1.81	1.81	3.05

ATTACHMENT B

Minor NSR Permit
(dated August 19, 2004)

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Valley Regional Office

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

Street address: 4411 Early Road, Harrisonburg, Virginia 22801
Mailing address: P.O. Box 3000, Harrisonburg, Virginia 22801-9519
Telephone (540)574-7800 Fax (540)574-7878
www.deq.state.va.us

Robert G. Burnley
Director

R. Bradley Chewning, P.E.
Valley Regional Director

August 20, 2004

Mr. Robert D. Golightly
General Manger
Valley Proteins, Inc. - Winchester
P.O. Box 3588
Winchester, VA 22604

Facility: Valley Proteins, Inc. - Winchester
Location: Frederick County
Registration No.: 80092
Plant ID No.: 51-069-0011

Dear Mr. Golightly:

Attached is minor amendment to your permit to modify and operate a rendering facility by replacing the existing direct contact condenser (DCC) with a similarly sized air cooled condenser (ACC-251) in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. Permit changes are reflected in Conditions 1, 2, 10, and 13. This permit supersedes your permit dated June 18, 2003.

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

In the course of evaluating the application and arriving at a final decision to approve the project, the Department of Environmental Quality (DEQ) deemed the application complete on July 27, 2004.

This minor amendment to install a new air cooled condenser (ACC-251) shall not relieve Valley Proteins, Inc. - Winchester of the responsibility to comply with all other local, state, and federal permit regulations.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provides that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you.

9 VAC 5-170-180 provides that you may request direct consideration of the decision by the Board if the Director of the DEQ made the decision. Please consult the relevant regulations for additional requirements for such requests.

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

Robert G. Burnley, Director
Department of Environmental Quality
P.O. Box 10009
Richmond, Virginia 23240-0009

In the event that this decision is served on you 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 information on the required content of the Notice of Appeal and for additional requirements governing appeals from decisions of administrative agencies.

If you have any questions concerning this permit, please call Patty Buonviri of the Valley Regional Office at (540) 574-7823 or (540) 872-3361.

Sincerely,

Larry M. Simmons, P.E.
Deputy Regional Director

Attachments: Permit

cc: Director, OAPP (electronic file submission)
Manager, Data Analysis (electronic file submission)

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATIONARY SOURCE PERMIT TO MODIFY AND OPERATE

In compliance with the Federal Clean Air Act and the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution,

This permit supersedes your permit dated June 18, 2003.

Valley Proteins, Inc. - Winchester
P.O. Box 3588
151 Val-Pro Road
Winchester, Virginia 22604
Registration No.: 80092
Plant ID No.: 51-069-0011

is authorized to operate

a rendering facility

located at

1635 Indian Hollow Road
Frederick County, Virginia

in accordance with the Conditions of this permit.

Approved on August 19, 2004

for Director, Department of Environmental Quality

Permit consists of 16 pages.
Permit Conditions 1 to 50.
Attachment A – Air Pollution Control Equipment List.
Pollution Prevention Report Form

PERMIT CONDITIONS - the regulatory reference or authority for each condition is listed in parentheses ( ) after each condition.

APPLICATION

1. Except as specified in this permit, the permitted facility is to be operated as represented in the permit applications dated July 21, 2004, July 12, 2004, February 6, 2003, September 9, 2002 and October 24, 2000, including supplemental information dated March 27 and 28, 2003, February 3, 4, 10 and 13, 2003, January 23 and 24, 2003, November 8, 2002, February 21, 2001 and March 5, 2001. Any changes in the permit application specifications or any existing facilities which alter the impact of the facility on air quality may require a permit. Failure to obtain such a permit prior to construction may result in enforcement action.
(9 VAC 5-50-390 B and 9 VAC 5-80-1210 D)

2. **Equipment List** - Equipment to be operated at this facility consists of:

   - one Dupps 320U Continuous Cooker (Ref. # CC-1) rated at 25 tons /hour and equipped with two Air Cooled Condensers (Ref. # ACC-250 & ACC-251).

   - two Cleaver Brooks boilers (Ref # B-1 and B-2) each rated at 23.4 MMBtu/hr.

   - two Feather Batch Cookers (Ref. # FC-1 and FC-2) each rated at 1.75 tons/hr.

   The air pollution control equipment to be operated at the facility is listed in Attachment A.

   (9 VAC 5-80-1100)

FUEL BURNING REQUIREMENTS

3. **Fuel (P2)** – 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 5-80-1180 D)

4. **Fuel Throughput (P2)** – The fuel throughput to the two Cleaver Brooks boilers (B-1 and B-2) shall not exceed the <u>lesser</u> 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:

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

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 5-80-1180 D)

5. **Fuel Specifications (P2)** - 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 5-80-1180 D)

6. **Fuel Certification** - 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 5-80-1180 D)

7. **Operating and Training Procedures** - 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. 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 5-80-1180 D and 9 VAC 5-50-260)

8. **Hourly Emission Limits: Processed Animal Fat (P2)** - 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 5-50-260 and 9 VAC 5-80-1180 D)

9. **Hourly Emission Limits: Residual Oil (P2)** – 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 5-50-260 and 9 VAC 5-80-1180 D)

10. **Annual Emission Limits (P2)** – Total 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

Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period. Emissions may be calculated using the equation in Condition 26. 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 Condition numbers 4, 5, 11 and 12.
(9 VAC 5-50-260 and 9 VAC 5-80-1180 D)

11. **Visible Emission Limit** - 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 5-50-80 and 9 VAC 5-50-260)

12. **Visible Emission Limit** - 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 5-50-80 and 9 VAC 5-50-260)

RENDERING PROCESS REQUIREMENTS

13. **Emission Controls** – 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 incinerated as combustion air in the boilers (B-1 and B-2):

- The Dupps 320 U 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 only 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 5-50-260 and 9 VAC 580-1180 D)

14. **Emission Controls** – 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 5-50-260 and 9 VAC 5-80-1180 D)

15. **Monitoring Devices** - 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 5-80-1180 D and 9 VAC 5-50-20 C)

16. **Monitoring Device Observation** - 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 5-80-1180 D and 9 VAC 5-50-20 C)

17. **Emission Controls** - The exhaust temperature of the emissions leaving the Venturi scrubbers (VS-1 and VS) shall be maintained below 120°F.
(9 VAC 5-80-1180 D and 9 VAC 5-50-260)

18. **Monitoring Devices** -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 5-80-1180 D and 9 VAC 5-50-20 C)

19. **Monitoring Device Observation** - 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 5-80-1180 D and 9 VAC 5-50-20 C)

20. **Production Throughput** - 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 5-80-1180 D)

21. **Emission Limits** – 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 20 and 22.
(9 VAC 5-50-260 and 9 VAC 5 80-1180 D)

22. **Visible Emission Limit** - 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 5-50-80, 9 VAC 5-50-260 and 9 VAC 5-80-1180 D)

MAINTENANCE AND MALFUNCTION REQUIREMENTS

23. **Operator Training** - 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 5-80-1180 D)

CONTINUING COMPLIANCE DETERMINATION

24. **Stack Tests** – 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 50-50-30 G)

25. **Visible Emissions Evaluations** - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the two Cleaver Brooks boilers (B-1 and B-2) and 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 5-50-30 G)

MONITORING AND RECORDKEEPING

26. **Monitoring** – 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 1

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 10.
(9 VAC 5-80-1180)

27. **Emission Factors** – 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 5-80-1180)

28. **On Site Records** - 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) 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. 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.

d. 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.

e. A log of all daily monitoring device observations as required by Conditions 16 and 19 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).

f. Emissions calculations demonstrating compliance with annual emissions limitations in Condition 10.

g. All visible emission evaluations and stack test results.

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

i. 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).

j. Operator and training procedure records as required by Conditions 7 and 23.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-50)

GENERAL CONDITIONS

29. **Right of Entry** - The permittee shall allow authorized local, state and federal representatives, upon the presentation of credentials:

a. To enter upon the permittee's premises on which the facility is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy at reasonable times any records required to be kept under the terms and conditions of this permit or the State Air Pollution Control Board Regulations;

c. To inspect at reasonable times any facility, equipment, or process subject to the terms and conditions of this permit or the State Air Pollution Control Board Regulations; and

d. To sample or test at reasonable times.

For purposes of this condition, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is in operation. Nothing contained herein shall make an inspection time unreasonable during an emergency.
(9 VAC 5-170-130)

30. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Director, Valley Regional Office, of malfunctions of the

affected facility or related air pollution control equipment that may cause excess emissions for more than one hour, by facsimile transmission, telephone or telegraph. Such notification shall be made as soon as practicable but not later than four daytime business hours after the malfunction is discovered. The permittee shall provide a written statement giving all pertinent facts, including the estimated duration of the breakdown, within 14 days of the discovery. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Director, Valley Regional Office, in writing.
(9 VAC 5-20-180 C)

31. **Violation of Ambient Air Quality Standard** - The permittee shall, upon request of the DEQ, reduce the level of operation or shut down a facility, as necessary to avoid violating any primary ambient air quality standard and shall not return to normal operation until such time as the ambient air quality standard will not be violated.
(9 VAC 5-20-180 I)

32. **Permit Suspension/Revocation** - This permit may be suspended or revoked if the permittee:

    a. Knowingly makes material misstatements in the application for this permit or any amendments to it;

    b. Fails to comply with the conditions of this permit;

    c. Fails to comply with any emission standards applicable to the equipment listed in Condition 2;

    d. Causes emissions from this facility which result in violations of, or interferes with the attainment and maintenance of, any ambient air quality standard;

    e. Fails to operate this facility in conformance with any applicable control strategy, including any emission standards or emission limitations, in the State Implementation Plan in effect on the date that the application for this permit is submitted; or

    f. Fails to modify or operate this facility in accordance with the application for this permit or any amendments to it.

    (9 VAC 5-80-1210 F)

33. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current permit issued to the previous owner. The new owner shall notify the Director, Valley Regional Office, of the change in ownership within 30 days of the transfer.
(9 VAC 5-80-1240)

34. **Registration/Update** - Annual requirements to fulfill legal obligations to maintain current stationary source emissions data will necessitate a prompt response by the permittee to requests by the DEQ or the Board for information to include, as appropriate: process and production data; changes in control equipment; and operating schedules. Such requests for information from the DEQ will either be in writing or by personal contact. The availability of information submitted to the DEQ or the Board will be governed by applicable provisions of the Freedom of Information Act, §§ 2.1-340 through 2.1-348 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9 VAC 5-170-60 of the State Air Pollution Control Board Regulations. Information provided to federal officials is subject to appropriate federal law and regulations governing confidentiality of such information. (9 VAC 5-20-160 and 9 VAC 5-170-60)

35. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies. (9 VAC 5-170-160)

STATE-ONLY ENFORCEABLE REQUIREMENTS

This section is included pursuant to 9 VAC 5-80-1120 F., and is not required under the federal Clean Air Act or under any of its applicable federal requirements. This section is only enforceable by the Commonwealth of Virginia State Air Pollution Control Board and its designees.

ODOR CONTROL PROCESS REQUIREMENTS

36. **Odor Controls (P2)** – Exterior doors shall be kept closed at all times unless some activity prevents them from being closed, for example, the unloading of trucks, trailers, equipment or material being moved in or out. (9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

37. **Odor Controls** – The permittee shall not cause or permit any odorous emissions to be discharged into the atmosphere from the permittee's property which causes an odor objectionable to individuals of ordinary sensibility. (9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

38. **Odor Control** – In the event DEQ investigates and determines that excessive odor exists, DEQ may require that the raw materials no longer be fed to the process causing the odor. The remaining raw materials for this process and any incoming raw material shall be diverted to another plant site until the problem is corrected. (9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

39. **Emission Limits** – Total emissions from the scrubbers controlling the rendering process (PTS- 1,PTS-2 and CFS-1) shall not exceed the limits specified below:

Chlorine	0.09 lbs/hr	0.20 tons/yr

(9 VAC 5 80-1180 D and 9 VAC 5-60-320)

RECEIVING, UNLOADING AND LOADOUT REQUIREMENTS

40. **Odor Control** – The permittee shall unload and process all raw material in a timely manner upon arrival at the facility.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

41. **Odor Control (P2)** – With the exception of trucks containing street-tonnage, vehicles used for hauling incoming raw materials:

    a. Shall be constructed and operated so as to prevent spillage, and covered to prevent exposure to odor carrying air currents.

    b. Vehicles, upon being unloaded, shall be promptly washed and deodorized prior to being parked or put back on the road.

    c. There shall be no more than one uncovered vehicle in transit between the unloading area and the scales at any given time.

    d. In those instances where uncovered, partially unloaded vehicles are parked outside the plant enclosure prior to complete unloading, the trucks shall be covered within 15 minutes of parking.

    e. A record shall be kept which identifies each vehicle and records the arrival and unloading time of each truck. These records shall be available for inspection.

    (9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

42. **Odor Control (P2)** - Outgoing loaded vehicles shall be removed from the property immediately. All loadout vehicles shall be constructed and operated so as to prevent spillage, and covered to prevent exposure to odor carrying air currents.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

HAUL ROADS/PARKING LOTS

43. **Odor Control (P2)** – Unloading and outloading areas outside the buildings shall be paved with a non-porous material to avoid malodorous contamination.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

44. **Odor Control (P2)** – All spilled raw or processed material, whether solid or liquid, shall be cleaned up immediately.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

TESTING

45. **Odor Evaluations** – Odor evaluations shall be conducted for determining the existence of excessive odorous emissions through the use of one or more of the following methods: field odor measurement, evaluation of odor control equipment operating parameters, and evaluation of plant operation and maintenance. The initial evaluation shall be performed within 60 days after achieving the maximum production rate, but in no event later than 90 days after permit issuance. Compliance shall be determined based on a thorough review of all data or evidence relating to the methods listed above. Initially, these evaluations shall be conducted quarterly. Details of the evaluations are to be arranged with the Director, Valley Regional Office. The permittee shall submit a performance evaluation protocol at least 30 days prior to the initial performance evaluation. The protocol should include an operating parameter checklist that allows a comparison to the established optimal operating ranges. Written notification shall be given to the Director, Valley Regional Office, of the anticipated date of each quarterly performance evaluation, postmarked at least 30 days prior to such date. The evaluation results shall be submitted to the Director, Valley Regional Office, within 30 days after completion of the evaluation. If four consecutive quarterly evaluations have been performed demonstrating satisfactory compliance, the permittee may submit a request to the Director, Valley Regional Office, to reduce the frequency of the evaluations.
(9 VAC 5-50-140 and 9 VAC 5-80-1200)

46. **Stack Test Evaluation** - If the results from any stack test indicate that chlorine is emitted from the scrubbers in quantities that exceed the exemption levels in 9 VAC 5-60-300, the permittee shall demonstrate that the chlorine emissions from the facility do not and will not, cause, or contribute to, any of the significant ambient air concentrations in 9 VAC 5-60-330 being exceeded. The details of this demonstration shall be arranged with the Director, Valley Regional Office.
(9 VAC 5-80-1180 D and 9 VAC 5-60-320)

RECORDKEEPING AND MONITORING

47. **Odor Complaints** – The permittee shall keep a log of odor complaints received and action(s) taken. This log shall be available for inspection by any State or County Official. The Director, Valley Regional Office, shall be notified by the close of business on the next full business day following the receipt of any complaint. In addition, the owner shall provide within 14 days, copies of each individual odor response form explaining the results of the odor investigation and corrective actions taken.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

48. **Malfunction Abatement Plan** - The permittee shall submit a malfunction abatement plan to minimize the duration and frequency of malfunctions, which may result in emissions of odors objectionable to individuals of ordinary sensibility. The plan shall be submitted in writing for approval by the Director, Valley Regional Office, within 90 days of permit issuance, and shall specify all of the following:

a. A complete preventative maintenance program, including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or condition that shall be inspected, the frequency of these inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.

b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.

c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

The permittee shall operate in accordance with the approved malfunction abatement plan. Any changes made to the malfunction abatement plan shall be submitted for approval by the Director, Valley Regional Office, within 30 days of the change. The permittee shall review the malfunction abatement plan annually to insure that the plan can be practically implemented under normal operating conditions. The results of this review shall be submitted to the Director, Valley Regional Office, by March 1 of each year.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

49. **Odor Control Records** – The permittee shall maintain records of odor control parameters as necessary to demonstrate compliance with this State Only Enforceable section of the 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 the following:

a. Log of all spills and clean up action(s) taken required by Condition 45 of this permit.

b. DEQ approved Malfunction Abatement Plan as required by Condition 49 of this permit.

c. Copy of the results from the initial performance test and all subsequent odor tests required by Condition 46.

d. Record of truck arrival and unloading times.

e. Odor complaint records.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.
(9 VAC 5-50-140 and 9 VAC 5-80-1180 D)

POLLUTION PREVENTION

50. **Pollution Prevention** – The permittee shall submit semi-annual pollution prevention reports to the Director, Valley Regional Office. The reports shall be submitted within 30 days after the end of the reporting periods ending June 30 and December 31 and shall conform to the pollution prevention report form enclosed with this permit. (9 VAC 5-80-1180 D)

Attachment A

Air Pollution Control Equipment List

- One 6000 cfm Venturi Scrubber (VS-1)
- One 6000 cfm Packed Tower Scrubber (PTS-2)
- One 3000 cfm Venturi Scrubber (VS)
- One 3000 cfm Packed Tower Scrubber (PTS-1)
- One Cross flow scrubber (CFS-1)

Pollution Prevention Report Format

Facility Name: Valley Proteins, Inc. - Winchester Facility
Registration Number: 80092
Permit Date:
Reporting Period: [January 1 thru June 30] or [July 1 thru December 31]

FUEL

[redacted]	Actual Throughput*	Actual % Sulfur
[redacted]		
[redacted]		
[redacted]		
[redacted]		

* Note: This value should reflect the rolling 12-month total as calculated at the end of June or December (depending on the report date).

Comments

Responsible Official:
Name:
Signature:
Date:

ATTACHMENT C

Emission Calculations for CAM Applicabilty

Table 1. PM_{10} Emissions
Rendering Operations
CAM Applicability Demonstration
Valley Proteins, Winchester, VA

Source	Gases From Cookers PM_{10} lbs/yr	Air Cooled & Direct Contact Condenser Efficiency %	Non-Condensible Gases PM_{10} lbs/yr[1]	Scrubber Efficiency (Venturi & Packed Tower) %	PM_{10} Emission Factor lb/ton[1]	Maximum Throughput tons/yr[2]	Controlled Emissions (PTS1) PM_{10} lbs/yr[3]
320U and Batch Cookers	343,254	50%	171,627	98%	1.9	180,660	3,433
	tons/yr		tons/yr				tons/yr
	171.6		**85.8**				**1.72**

[1] Estimated PM_{10} emissions contained in non-condensible gases exiting the Condensers. The PM_{10} value was derived from the Winchester, VA VADEQ-approved emission factors and known control efficiencies for scrubbers. Valley Proteins believes that the non-condensible gases from the condensers represent the uncontrolled emissions, since the condensers are an integral part of the cooker system.

[2] The maximum throughput is derived from the annual limit and maximum hourly rate: 150,000 tons/yr for the 320U and 1.75 tons/hr * 8760 hrs/yr * 2 for the batch cookers.

[3] For this analysis it was assumed that PM is equal to PM_{10} and that the venturi and packed tower scrubbers have a combined efficiency of 98%.

It should be noted that the condensers are not control devices, instead they are an integrel part of the cooker system. The cooker system requires these devices to capture and remove solids to recover as finish product, instead of losing product to the atmosphere.