



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF ENVIRONMENTAL QUALITY TIDEWATER REGIONAL OFFICE

Molly Joseph Ward  
Secretary of Natural Resources

5636 Southern Boulevard, Virginia Beach, Virginia 23462  
(757) 518-2000 Fax (757) 518-2009  
[www.deq.virginia.gov](http://www.deq.virginia.gov)

David K. Paylor  
Director

Craig R. Nicol  
Regional Director

July 12, 2017

Mr. Wayne Black  
Director, Perdue AgriBusiness  
Perdue AgriBusiness - Chesapeake  
Perdue Farms, Inc.  
3539 Governors Road  
Lewiston Woodville, North Carolina 27849

Location: Chesapeake  
**Registration No.: 60277**

Dear Mr. Black:

Attached is a permit to construct and operate a project at an extraction plant and grain elevator facility in accordance with the provisions of the Virginia State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. This permit supersedes your permits dated February 8, 2016 (NSR), February 19, 2009 (NSR/SOP), and October 5, 2009 (NSR).

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

This permit approval to construct and operate shall not relieve Perdue Agribusiness of the responsibility to comply with all other local, state, and federal permit regulations.

The proposed extraction plant, grain elevator, boilers and engines may be subject to 40 CFR 63, Maximum Achievable Control Technology, (MACT) Subparts GGGG, DDDDDD, and ZZZZ and 40 CFR 60, New Source Performance Standard (NSPS), Subparts DD, Dc, and IIII. Virginia has not accepted delegation of all of these rules. In summary, the units may be required to comply with certain federal emission standards and operating limitations. The Department of Environmental Quality (DEQ) advises you to review the referenced MACT and NSPS to ensure compliance with applicable emission and operational limitations. As the owner/operator you may also be responsible for any monitoring, notification, reporting and recordkeeping requirements of the MACT and NSPS. Notifications shall be sent to both EPA, Region III and Virginia DEQ.

To review any federal rules referenced in the above paragraph or in the attached permit, the US Government Publishing Office maintains the text of these rules at [www.ecfr.gov](http://www.ecfr.gov), Title 40, Part 60 and 63.

The Board's Regulations as contained in Title 9 of the Virginia Administrative Code 5-170-200 provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this case decision notice was mailed or delivered to you. 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 you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal of this decision by filing a Notice of Appeal with:

David K. Paylor, Director  
Department of Environmental Quality  
PO Box 1105  
Richmond, VA 23218

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

If you have any questions concerning this permit, please contact Dan Dobbins at (757) 518-2138 or by e-mail at [daniel.dobbins@deq.virginia.gov](mailto:daniel.dobbins@deq.virginia.gov).

Sincerely,



Janet F. Weyland  
Regional Deputy Director

JFWDDD\60277\_031\_17\_cvr\tr\_PSD\_NSRNewMajor\_Perdue AgriBusiness\_Ches.docx

Attachment: Permit

cc: Director, OAPP (electronic file submission)  
Chief, Air Enforcement Branch (3AP13), U.S. EPA, Region III (electronic file submission)  
Manager/Inspector, Air Compliance



*COMMONWEALTH of VIRGINIA*

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David K. Paylor  
Director

Craig R. Nicol  
Regional Director

**PREVENTION OF SIGNIFICANT DETERIORATION PERMIT  
STATIONARY SOURCE PERMIT TO CONSTRUCT AND OPERATE**

**This permit includes designated equipment subject to  
New Source Performance Standards (NSPS).**

This permit supersedes your permits dated  
February 8, 2016, February 19, 2009, and October 5, 2009.

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

Perdue Grain and Oilseed, LLC  
501 Barnes Road  
Chesapeake, Virginia 23324  
**Registration No.: 60277**

is authorized to construct and operate

located at Soybean Oil Extraction and Grain Elevator Facility  
501 Barnes Road  
Chesapeake, Virginia 23324

in accordance with the Conditions of this permit.

Approved on: July 12, 2017

Janet F. Weyland  
Regional Deputy Director,  
Tidewater Regional Office

Permit consists of 28 pages.  
Permit Conditions 1 to 95.

**INTRODUCTION**

This permit approval is based on the permit application dated February 4, 2016, including supplemental information dated March 27, 2017 and May 5, 2017; application dated December 6, 1978, December 14, 2001, March 30, 2006, November 15, 2007 and November 19, 2008, including amendment information dated January 9, 1979, March 23, 1979, April 24, 2002, July 10, 2006, October 8, 2006, October 31, 2006 and February 4, 2009; application dated July 13, 2009, including amendment information dated September 7, 2009; application dated April 17, 2003, April 7, 2010, May 7, 2010 and July 27, 2011, February 7, 2014, April 15, 2014, July 23, 2014 and December 4, 2015, including amendment information dated July 29, 2011, and December 4, 2015, and supplemental information dated June 4, 2010, June 18, 2010, February 15, 2011, June 15, 2011, July 29, 2011, August 4, 2011, August 22, 2011, December 14, 2011, December 22, 2011 and March 20, 2012, July 31, 2014. 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. In addition, this facility may be subject to additional applicable requirements not listed in this permit.

Words or terms used in this permit shall have meanings as provided in 9VAC5-10-20 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution. The regulatory reference or authority for each condition is listed in parentheses () after each condition.

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, §§ 2.2-3700 through 2.2-3714 of the Code of Virginia, § 10.1-1314 (addressing information provided to the Board) of the Code of Virginia, and 9VAC5-170-60 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.

**Equipment List** – Equipment included in project:

Emission Unit ID	Equipment Description	Rated Capacity	Applicable NSPS
<b>Grain Elevator Facility encompasses the following equipment:</b>			
EU-31	Column Grain Dryer	39.5 MMBtu/hr, 150 tons/hr	NSPS Subpart DD
EU-32	Column Grain Dryer	39.5 MMBtu/hr, 150 tons/hr	NSPS Subpart DD

EU-33	Truck/Container Loadout Station	200 ton/hr	NSPS Subpart DD
EU-34	Neuro Marine Vessel Unloading Station	550 ton/hr	NSPS Subpart DD
EU-56	Neuro Marine Vessel Loading and Unloading Station	1,680 ton/hr	NSPS Subpart DD
EU-35A	Marine Vessel Loading - Two Arms	1,680 ton/hr	NSPS Subpart DD
EU-35B	Marine Vessel Loading – Two Arms	1,680 ton/hr	NSPS Subpart DD
EU-36	New Truck Unloading Station – Two Bays	1,120 ton/hr	NSPS Subpart DD
EU-37	Old Truck Unloading Station - Two Bays	1,120 ton/hr	NSPS Subpart DD
EU-38A	Rail Car Receiving/Unloading	1,390 ton/hr	NSPS Subpart DD
EU-38B	Rail Car Loading	600 ton/hr	NSPS Subpart DD
EU-38C	Steel Storage Silos	5.0 Million Bushels	
EU-38D	Weigh Stations for Loading/Unloading	1,680 ton/hr	NSPS Subpart DD
EU-40A	Turnheads For Concrete Storage Silos	1,680 ton/hr	NSPS Subpart DD
EU-40B	Concrete Storage Silos	1.5 Million Bushels	NSPS Subpart DD
EU-41	Ship Loading Gallery	1,680 ton/hr	NSPS Subpart DD
EU-42	Internal Grain Handling Process	1,680 ton/hr	NSPS Subpart DD
EU-46	Dust Tank A	22 ton/hr	
EU-47	Dust Tank B	22 ton/hr	
EU-48	Tank 100	900 ton/hr	
EU-49	Tank 200	900 ton/hr	
EU-50	Tank 300	900 ton/hr	
EU-51	Tank 400	900 ton/hr	
EU-52	Tank 500	900 ton/hr	
EU-53	Tank 600	150 ton/hr	
<b>Soybean Oil Extraction Facility encompasses the following equipment:*</b>			
EU-1	Tank 31; Dried bean storage	135 ton/hr*	
EU-2	Tank 32; Dried bean storage	135 ton/hr*	
EU-3	Tank 33; Dried bean storage	135 ton/hr*	
EU-4	Tank 34; Dried bean storage	135 ton/hr*	
EU-5	Tank 35; Dried bean storage	135 ton/hr*	
EU-6	Tank 40; Dried bean storage	135 ton/hr*	

EU-7	Tank 41; Dried bean storage	135 ton/hr*	
EU-8	Tank 42; Dried bean storage	135 ton/hr*	
EU-9	Tank 43; Dried bean storage	135 ton/hr*	
EU-10	Tank 44; Dried bean storage	135 ton/hr*	
EU-45	Compuweigh Two Garner Scale	300 ton/hr	
EU-11B	Whole bean cleaning to include aspirator	135 ton/hr*	
EU-11C	Dehulling-5 primary soybean rolling/cracking rollers with 5 aspirators	135 ton/hr*	
EU-11D	Dehulling-2 secondary hull cracking impactors (east & west) with 4 aspirators	135 ton/hr*	
EU-11E	Hull cleaning - coarse hull aspirator	135 ton/hr*	
EU-11F	Hull cleaning - mids hull aspirator	135 ton/hr*	
EU-12A	Ground Hull Tank A	135 ton/hr*	
EU-12C	Grain Dust Transfer Line to Ground Hull Tanks	135 ton/hr*	
EU-13A	Flakers/discharge drag (North) (A to F); soybean flaking	135 ton/hr*	
EU-13B	Flakers/discharge drag (South) (H to N); soybean flaking	135 ton/hr*	
EU-44	Expander and Expander After cooler	106 ton/hr	
EU-14A	Extractor	135 ton/hr*	
EU-14B	Desolventizer toaster	135 ton/hr*	
EU-14C	Miscella Tank	135 ton/hr*	
EU-14D	Solvent Water Separator	135 ton/hr*	
EU-14E	Small Hexane Tank	135 ton/hr*	
EU-14F	Large Hexane Tank	135 ton/hr*	
EU-14G	1st Stage Rising Film Evaporator (RFE)	135 ton/hr*	
EU-14H	2nd Stage RFE	135 ton/hr*	
EU-14I	Finished Oil Stripper	135 ton/hr*	
EU-15	DeSmet dryer/cooler; soybean meat drying and cooling	128 ton/hr*	
EU-16	DeSmet dryer/cooler; soybean meat drying and cooling	128 ton/hr*	
EU-17A	Meal Sifters	135 ton/hr*	
EU-17B	Meal Grinders	135 ton/hr*	
EU-17C	Sifter Feed Drag	135 ton/hr*	
EU-17D	Grinder Feed Drag	135 ton/hr*	

EU-17E	Grinder Discharge Drag	135 ton/hr*	
EU-18	North meal tank; meal storage	135 ton/hr*	
EU-19	South pellet/meal tank; pellet/meal storage	250 ton/hr*	
EU-20	Meal shed	135 ton/hr*	
EU-21A	Rail Loadout – Meal/Pellets	Meal loading - 135 ton/hr* Pellet loading - 250 tons/hr*	
EU-21B	Truck Loadout – Meal/Pellets	Meal loading - 135 ton/hr* Pellet loading - 250 tons/hr*	
EU-21C	Merrick Scale – Meal/Pellets	Meal loading - 135 ton/hr* Pellet loading - 250 tons/hr*	
EU-21D	Mettler Scale – Meal/Pellets	Meal loading - 135 ton/hr* Pellet loading - 250 tons/hr*	
EU-22A	Production tank blower; soybean hull pelletizing fines from ground hull tank	135 ton/hr*	
EU-22B	Hull Receiving Bin - Pellet production tank	135 ton/hr*	
EU-57	Hull Truck Unloading	20 ton/hr	
EU-23	Pellet cooler; soybean hull pelletizing	15 ton/hr	
EU-24	Meal Storage Dome #1	93.8 ton/hr	
EU-25	Meal Storage Dome #2	93.8 ton/hr	
EU-55	Meal Storage Dome #3	93.8 ton/hr	
EU-26	Meal Conveyors from Domes to bucket elevator and elevator drop with fabric filter	93.8 ton/hr	
EU-58	Cooling Towers	8,000 gpm	
<b>Other Units at the Facility:</b>			
TB-1	Natural gas or diesel fuel-fired rental boiler	98 MMBtu/hr	NSPS Subpart Dc
TB-2	Natural gas or diesel fuel-fired rental boiler	98 MMBtu/hr	NSPS Subpart Dc
B-1	Natural gas/diesel fuel-fired boiler	27.01 MMBtu/hr / 26.04 MMBtu/hr	NSPS Subpart Dc
B-2	Natural gas/diesel fuel-fired boiler	27.01 MMBtu/hr / 26.04 MMBtu/hr	NSPS Subpart Dc
B-3	Natural gas/diesel fuel-fired boiler	27.01 MMBtu/hr / 26.04 MMBtu/hr	NSPS Subpart Dc
B-4	Natural gas/diesel fuel-fired boiler	27.01 MMBtu/hr / 26.04 MMBtu/hr	NSPS Subpart Dc
EG-1	Emergency Generator Engine	760 hp	NSPS Subpart IIII

\*For Soybean Oil Extraction Facility, throughput in units of ton whole beans per hour.

Specifications included in the above tables are for informational purposes only and do not form enforceable terms or conditions of the permit.

## **PROCESS REQUIREMENTS**

1. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Expander and the Expander After-Cooler process (EU-44) shall be controlled by high efficiency cyclones. Each cyclone shall be provided with adequate access for inspection and shall be in operation when the Expander or the Expander after-cooler is operating. (9VAC5-80-1180 and 9VAC5-50-260)
2. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Compuweigh two garner scale (EU-45), Bean Prep Cleaning process (EU-11B), Bean Prep Cracking/Dehull process (EU-11C and EU-11D), and Bean Prep Hull Cleaning process (EU-11E and EU-11F) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the units are operating. (9VAC5-80-1180 and 9VAC5-50-260)
3. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Bean Prep Flaking process (EU-13A and EU-13B) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when either unit is operating. (9VAC5-80-1180 and 9VAC5-50-260)
4. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Meal Grinding and Shifting process (EU-17A through EU-17E) shall be controlled by fabric filter. The fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the units are operating. (9VAC5-80-1180 and 9VAC5-50-260)
5. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Hull Grinder and Product Tank process (EU-12A and EU-12C) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the units are operating. (9VAC5-80-1180 and 9VAC5-50-260)
6. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Ground Hull Transfer and Hopper process (EU-22A and EU-22B) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the units are operating. (9VAC5-80-1180 and 9VAC5-50-260)
7. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Pellet Cooler process (EU-23) shall be controlled by a high efficiency cyclone. The cyclone shall be provided with adequate access for inspection and shall be in operation when the pellet cooler is operating. (9VAC5-80-1180 and 9VAC5-50-260)

8. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Load Out process (EU-21A through EU-21D) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when any of the units are operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
9. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Pellet Storage Tank process (EU-19) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the Pellet storage tank is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
10. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Dryer/Cooler process (EU-15 and EU-16) shall be controlled by cyclones. The cyclones shall be provided with adequate access for inspection and shall be in operation when either the dryer or cooler is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
11. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Meal Dome process [soybean meal storage domes (EU-24, EU-25, and EU-55) and the associated conveyors and bucket elevator (EU-26)] shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated unit is in operation.  
(9VAC5-80-1180 and 9VAC5-50-260)
12. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the meal shed (EU-20) shall be controlled by the addition of soybean gum to the meal prior to transfer to the shed.  
(9VAC5-80-1180 and 9VAC5-50-260)
13. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Meal Storage Tank process (EU-18) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the meal storage tank is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
14. **Emission Controls** – Particulate Matter (PM, PM10, and PM2.5) emissions from the Cooling Tower process (EU-58) shall be controlled by a drift eliminator designed with a drift rate of 0.02 percent of the circulated water flow. The drift eliminator shall be provided with adequate access for inspection and shall be in operation when the water cooling tower is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)

15. **Emission Controls: Equipment Leaks** - The permittee shall implement a daily Leak Detection and Repair (LDAR) program for detecting leaking components in the Soybean Oil Extraction Facility piping components to minimize the fugitive emissions of Volatile Organic Compounds (VOC). Daily audio/visual/olfactory (AVO) inspection observations will be recorded in writing and will be signed and dated by the person who conducted the inspection/reading. The first attempt to repair any component found to be leaking during an AVO inspection shall be made within 5 days. The leaking component shall be repaired within 15 days of discovery. The permittee shall maintain a list of difficult to repair components, which when leaking, the repair requires facility shutdown or cannot otherwise be completed within 15 days of discovery. Documentation justifying the inclusion of a component on the list shall be included. Records of the daily AVO inspection results, repair attempts, and the list of long-term leaking components and reason for each delay shall be maintained on site. A LDAR program plan shall be submitted to the Tidewater Regional Office for review no later than 60 days after the issuance of this permit. (9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)
16. **Emission Controls** –VOC emissions from the emergency generator engine (EG-1) shall be controlled by the use of good operating practices, the use of clean burning fuels, and performing appropriate maintenance in accordance with the manufacturer recommendations. In addition, the permittee may only change those settings that are permitted by the manufacturer. (9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)
17. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Marine Vessel Unloading process (EU-34 and EU-56) shall be controlled by fabric filter and telescoping pneumatic pickup pipes. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when either marine vessel unloader is operating. (9VAC5-80-1180 and 9VAC5-50-260)
18. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Marine Vessel Loading process (EU-35A, EU-35B, and EU-56) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when associated marine vessel loading unit is operating. The height of each loading spout or telescoping pneumatic pipe, during vessel loading operations, should be held at the position necessary to prevent as much fugitive emissions leaving the hold of the vessel as possible. (9VAC5-80-1180 and 9VAC5-50-260)
19. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Rail Car Receiving/Unloading and Rail Car Loading processes (EU-38A and EU-38B) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated rail car loading or unloading process is operating. (9VAC5-80-1180 and 9VAC5-50-260)

20. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Truck Receiving/Unloading process (EU-36 and EU-37) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated process is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
21. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Internal Grain Handling process (EU-42) shall be controlled using enclosed conveying systems and by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when grain handling operations are underway.  
(9VAC5-80-1180 and 9VAC5-50-260)
22. **Emission Controls** –Particulate emissions (PM, PM10, and PM2.5) from storage silos (EU-38C and EU-40B) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the respective storage silo is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
23. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Column Grain Dryers (EU31 and EU-32) shall be controlled by a 24 mesh 'screen airs' and cyclones on the recirculating side of the dryers. The mesh screen airs and the cyclones shall be provided with adequate access for inspection and shall be in operation when the grain dryers are operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
24. **Emission Controls** – Particulate emissions (PM, PM10, and PM2.5) from Truck and Container Loading process (EU33) shall be controlled by fabric filter. Each fabric filter shall be provided with adequate access for inspection and shall be in operation when the associated truck and container loading process is operating.  
(9VAC5-80-1180 and 9VAC5-50-260)
25. **Emission Controls** - Emissions from the boilers (B-1 through B-4) shall be minimized by the use of clean burning fuel, good combustion practices, low NOx burners, and proper maintenance procedures. The boiler shall be provided with adequate access for inspection.  
(9VAC5-80-1180, 9VAC5-50-260, 9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)
26. **Monitoring Devices** - Each fabric filter shall be equipped with a device to continuously measure the differential pressure drop across the fabric filter. 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 fabric filter is operating.  
(9VAC5-80-1180)

27. **Monitoring Devices** – The emergency generator engine (EG-1) shall be equipped with a non-resettable hour metering device to monitor the operating hours. The non-resettable hour meter used to continuously measure the hours of operation for each engine-generator set shall be observed by the owner with a frequency of not less than once each day the engine-generator set is operated. The owner shall keep a log of these observations and the reason for operation.  
(9VAC5-80-1985)
28. **Fugitive Dust Emission Controls** – Fugitive dust emission controls shall include the following, or equivalent, as approved by DEQ:
- a. Prompt removal of spilled grains, or leaked grains from the facility site shall be vacuumed and stored away from the wind to minimize the emissions of particulates from these materials.
  - b. Open equipment for conveying or transporting materials likely to create objectionable air pollution when airborne shall be covered, or treated in an equally effective manner at all times when in motion.
  - c. Prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
  - d. Dust from material handling, and load-outs, shall be controlled by wet suppression or equivalent.
  - e. Installation and use of long socks, and/or shrouds shall be used to minimize fine particle dust emissions when the dust tanks (EU-46 and EU-47) must be unloaded in times of emergency or equipment malfunction.
- (9VAC5-50-90, 9VAC5-80-1180, and 9VAC5-50-260)

### **OPERATING LIMITATIONS**

29. **Production** - The production of pellets from the pellet cooler (EU-23) shall not exceed 98,550 tons of pellets per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
30. **Processing** – Prior to the particulate control devices required in Conditions 1, 2, 4 through 14, 17 through 24, and 28.e beginning operation, except the control devices on EU-55 and EU-56 that must be operational at initial start-up of the respective emission unit, the Soybean Oil Extraction Facility shall process no more than 792,865 tons of whole soybeans per year, measured as throughput of the Compuweigh two garner scale (EU-45) and calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)

31. **Processing** – After the final particulate control device required in Conditions 1, 2, 4 through 14, 17 through 24, and 28.e begins operation, except the control devices on EU-55 and EU-56 that must be operational at initial start-up of the respective emission unit, the Soybean Oil Extraction Facility shall process no more than 1,095,000 tons of whole soybeans per year, measured as throughput of the Compuweigh two garner scale (EU-45) and calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
32. **Processing** - The hull truck unloading unit (EU-57) shall process no more than 32,850 tons of hulls per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
33. **Solvent Loss Ratio** - The solvent loss ratio (SLR) of the Soybean Oil Extraction Facility shall not exceed 0.18 gallons solvent/ton of beans processed. Upon startup of the new extractor the SLR shall not exceed 0.152 gallons solvent/ton of beans processed. The SLR limit is effective during all operational periods including startup, shutdown, and malfunction. Solvent loss ratio is calculated using the following equation:

$$\frac{\sum_{i=1}^{12} \text{Total Solvent Lost (gallons)}}{\sum_{i=1}^{12} \text{Total Weight of Beans Processed (tons)}} = \text{SLR}$$

Where:

Total Solvent Lost is calculated pursuant to 40CFR63.2853 except all periods of operation are considered.

Total weight of whole beans processed is calculated pursuant to Conditions 30 or 31, as applicable.

The SLR shall be calculated monthly as the ratio of total solvent lost and total weight of beans processed, each calculated by adding the total from the most recently completed calendar month to the individual monthly totals for the preceding 11 calendar months.  
(9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)

34. **Fuel** - The approved fuel for the emergency generator engine (EG-1) is diesel fuel. A change in the fuel shall be considered a change in the method of operation of the engine and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.  
(9VAC5-80-1985)

35. **Fuel** - The approved fuels for the boilers (B-1 through B-4) are diesel fuel as defined in Condition 36 and natural gas. A change in the fuel shall be considered a change in the method of operation of the boilers (B-1 through B-4) and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change. (9VAC5-80-1180 and 9VAC5-80-1985)

36. **Fuel** - The diesel fuel used by the boilers (B-1 through B-4) and emergency generator engine (EG-1) shall meet the specifications below:

DIESEL FUEL which meets the ASTM D975 specification for Grades 1 or 2 S15 diesel fuel oils:

Maximum sulfur content per shipment: 0.0015%  
(9VAC5-80-1180, 9VAC5-50-260, 9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)

37. **Fuel Certification** - The permittee shall obtain a certification from the fuel supplier with each shipment of diesel fuel as defined in Condition 36. Each fuel supplier certification shall include the following:

- a. The name of the fuel supplier;
- b. The date on which the diesel fuel was received;
- c. The quantity of diesel fuel delivered in the shipment;
- d. A statement that the diesel fuel complies with the American Society for Testing and Materials specifications (ASTM D975) for S15 diesel fuel oils; and
- e. The sulfur content of the diesel fuel.

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Condition 36. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits. (9VAC5-80-1180 and 9VAC5-80-1985)

38. **Throughput** – The grain throughput of the Truck Receiving/Unloading process (EU-36 and EU-37) shall not exceed 1,275,000 tons per year total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9VAC5-80-1180)

39. **Throughput** – The grain throughput of Rail Car Receiving/Unloading process (EU-38A) shall not exceed 2,500,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
40. **Throughput** – The marine unloading of grain (EU-34 and EU-56) shall not exceed 2,000,000 tons per year total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
41. **Throughput** – The grain throughput of the Column Grain Dryers total (EU-31 and EU-32), shall not exceed 1,500,000 tons per year total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
42. **Throughput** – The grain and grain products (meal) throughput for the Internal Grain Handling process (EU-42) shall not exceed 14,430,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
43. **Throughput** – The grain and grain products (meal) throughput for Storage Silos process (EU-38C, EU-40B, and EU-48 through EU-53) shall not exceed 7,275,000 tons per year total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
44. **Throughput** – The grain and grain products (meal) throughput of the Rail Car Loading process (EU-38B) shall not exceed 530,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)

45. **Throughput** – The grain and grain products (meal) throughput of the Marine Loading process (EU-35A, EU-35B, and EU-56) shall not exceed 5,025,000 tons per year total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
46. **Throughput** – The grain and grain products (meal) throughput of the Truck and Container Loading process (EU-33) shall not exceed 100,000 tons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
47. **Fuel** - The approved fuel for the grain dryers (EU-31 and EU-32) is natural gas. A change in the fuel shall be considered a change in the method of operation of the grain dryers and may require a new or amended permit. However, if a change in the fuel is not subject to new source review permitting requirements, this condition should not be construed to prohibit such a change.  
(9VAC5-80-1180)
48. **Fuel Throughput** - The natural gas-fired grain dryers (EU-31 and EU-32) shall consume no more than  $175 \times 10^6$  cubic feet of natural gas total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180)
49. **Permanent Shutdown** - Boilers TB-1 and TB-2 shall cease operation after a reasonable shakedown period of the boilers (B-1 through B-4), not to exceed 180 days after the initial start-up of the first boiler. Reactivation of these units (TB-1 or TB-2) will be considered a physical change to the stationary source.  
(9VAC5-80-1180 and 9VAC5-20-220)
50. **Fuel Throughput** - The boilers (B-1 through B-4) shall consume no more than  $698.1 \times 10^6$  cubic feet of natural gas total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180 and 9VAC5-80-1985)

51. **Fuel Throughput** - The boilers (B-1 through B-4) shall consume no more than 278,979 gallons of diesel fuel total, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.  
(9VAC5-80-1180 and 9VAC5-80-1985)

### **EMISSION LIMITS**

52. **Process Emission Limits** - Emissions from the operation of the expander and expander after-cooler unit (EU-44) shall not exceed the limits specified below:

PM	0.22 lb/hr
PM10	0.30 lb/hr
PM2.5	0.24 lb/hr

(9VAC5-80-1180 and 9VAC5-50-260)

53. **Process Emission Limits** - Emissions from the operation of the dryer/cooler (EU-15 and EU-16) total shall not exceed the limits specified below:

PM	1.2 lb/hr
PM10	1.0 lb/hr
PM2.5	0.88 lb/hr

(9VAC5-80-1180 and 9VAC5-50-260)

54. **Process Emission Limits** - Emissions from each fabric filter controlling the operation of the Meal Dome process (under dome conveyors and bucket elevator (EU-26) and soybean meal storage domes (EU-24, EU-25, and EU-55)) shall not exceed the limits specified below:

PM	0.0025 gr/dscf
PM10	0.0025 gr/dscf
PM2.5	0.0025 gr/dscf

(9VAC5-80-1180 and 9VAC5-50-260)

55. **Process Emission Limits** - Emissions from the operation of the Bean Prep Flaking process (EU-13A and EU-13B) shall not exceed the limits specified below:

PM	0.25 lb/hr
PM10	0.78 lb/hr
PM2.5	0.78 lb/hr

(9VAC5-80-1180 and 9VAC5-50-260)

56. **Process Emission Limits** - Emissions from the operation of the Meal Grinding and Shifting process (EU-17A through EU-17E) shall not exceed the limits specified below:

PM	4.6 lb/hr
PM10	4.6 lb/hr
PM2.5	4.6 lb/hr

(9VAC5-80-1180 and 9VAC5-50-260)

57. **Process Emission Limits** - Emissions from the operation of the meal storage tank (EU-18) shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 0.37 lb/hr |
| PM10  | 0.37 lb/hr |
| PM2.5 | 0.37 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
58. **Process Emission Limits** - Emissions from the operation of the Hull Grinder and Product Tank process (EU-12A and EU-12C) shall not exceed the limits specified below:
- |       |           |
|-------|-----------|
| PM    | 2.7 lb/hr |
| PM10  | 2.7 lb/hr |
| PM2.5 | 2.7 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
59. **Process Emission Limits** - Emissions from the operation of the Ground Hull Transfer and Hopper process (EU-22A and EU-22B) shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 0.68 lb/hr |
| PM10  | 0.68 lb/hr |
| PM2.5 | 0.68 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
60. **Process Emission Limits** - Emissions from the operation of the pellet cooler unit (EU-23) shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 0.45 lb/hr |
| PM10  | 0.95 lb/hr |
| PM2.5 | 0.72 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
61. **Process Emission Limits** - Emissions from the operation of the Bean Prep Cleaning process (EU-11B) shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 0.51 lb/hr |
| PM10  | 0.51 lb/hr |
| PM2.5 | 0.51 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
62. **Process Emission Limits** - Emissions from the operation of the Bean Prep Cracking/Dehull process (EU-11C and EU-11D) shall not exceed the limits specified below:
- |       |           |
|-------|-----------|
| PM    | 2.4 lb/hr |
| PM10  | 2.4 lb/hr |
| PM2.5 | 2.4 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)

63. **Process Emission Limits** - Emissions from the operation of the Bean Prep Hull Cleaning process (EU-11E and EU-11F) shall not exceed the limits specified below:
- |       |           |
|-------|-----------|
| PM    | 2.4 lb/hr |
| PM10  | 2.4 lb/hr |
| PM2.5 | 2.4 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
64. **Process Emission Limits** - Emissions from the exhaust of each fabric filter controlling the loadout process (EU-21A through EU-21D) during the loading of meal shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 0.33 lb/hr |
| PM10  | 0.33 lb/hr |
| PM2.5 | 0.33 lb/hr |
- (9VAC5-80-1180 and 9VAC5-50-260)
65. **Emissions Limit** - Emissions from the operation of the emergency generator engine (EG-1) shall not exceed the limits specified below:
- |     |            |              |
|-----|------------|--------------|
| VOC | 0.49 lb/hr | 0.12 tons/yr |
|-----|------------|--------------|
- Compliance with these emission limits may be determined as stated in Conditions 16, 27, 34, 36, and 37.  
(9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)
66. **Process Emission Limits** - Emissions from each fabric filter controlling the Truck Receiving/Unloading process (EU-36 and EU-37), Truck Loading process (EU-33), Rail Car Receiving/Unloading process (EU-38A), Rail Car Loading process (EU-38B), Marine Vessel Loading/Unloading process (EU-34, EU-35A, EU-35B, and EU-56), storage silos (EU-38C and EU-40B), and Internal Handling process (EU-42) shall not exceed the limits specified below:
- |       |              |
|-------|--------------|
| PM    | 0.01 gr/dscf |
| PM10  | 0.01 gr/dscf |
| PM2.5 | 0.01 gr/dscf |
- (9VAC5-80-1180 and 9VAC5-50-260)
67. **Process Emission Limits** - Emissions from the exhaust of each cyclone controlling the Column Grain Dryers (EU-31 and EU-32) shall not exceed the limits specified below:
- |       |            |
|-------|------------|
| PM    | 1.63 lb/hr |
| PM10  | 2.21 lb/hr |
| PM2.5 | 1.40 lb/hr |
| NOx   | 3.83 lb/hr |
| CO    | 3.22 lb/hr |
| VOC   | 0.21 lb/hr |
- (9VAC5-80-1180, 9VAC5-50-260, 9VAC5-80-1985, 9VAC5-80-1705 C, and 9VAC5-50-280)

68. **Emission Limits** - Emissions from the grain elevator facility, including fugitive emissions, shall not exceed the limits specified below:

PM	63.0 tons/yr
PM10	36.2 tons/yr
PM2.5	18.6 tons/yr
CO	7.4 tons/yr
NOx	8.8 tons/yr
VOC	0.5 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 17 through 24, 38 through 48, and 84. (9VAC5-80-1180 and 9VAC5-80-1985)

69. **Emission Limits** - Emissions from the soybean oil extraction facility, including fugitive emissions, shall not exceed the limits specified below:

PM	146.8 tons/yr
PM10	92.3 tons/yr
PM2.5	74.3 tons/yr
VOC	471.0 tons/yr

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 1 through 8, 10 through 15, 29 through 33, 71 through 73, and 84. (9VAC5-80-1180 and 9VAC5-80-1985)

70. **Boiler Emission Limits** - Emissions from the operation of each boiler (B-1, B-2, B-3, and B-4) process shall not exceed the limits specified below:

	<u>Each</u>		<u>Combined</u>
	Diesel Fuel	Natural Gas	
PM10	0.61 lb/hr	0.20 lb/hr	3.0 tons/yr
PM2.5	0.61 lb/hr	0.20 lb/hr	3.0 tons/yr
NOx	2.99 lb/hr	0.95 lb/hr	14.0 tons/yr
VOC	0.04 lb/hr	0.10 lb/hr	1.3 tons/yr

Annual emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 50 and 51. (9VAC5-80-1180, 9VAC5-50-260, 9VAC5-80-1705 C, and 9VAC5-50-280)

71. **Visible Emission Limit** - Visible emissions from the exhaust of all fabric filters in operation at the facility shall not exceed 5 percent (%) opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9VAC5-80-1985, 9VAC5-80-1180, and 9VAC5-50-260)
72. **Visible Emission Limit** - Visible emissions from the exhaust of all cyclones in operation at the facility shall not exceed 5% opacity, except for one six-minute period in any one hour of not more than 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9VAC5-80-1180 and 9VAC5-50-260)
73. **Visible Emission Limit** - Visible emissions from the meal storage (meal shed) (EU-20) shall not exceed 5% opacity, except for one six-minute period in any one hour of not more than 10% opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A).  
(9VAC5-80-1180 and 9VAC5-50-260)
74. **Visible Emission Limit** - Visible emissions from each fabric filter controlling the Truck Loading (EU-33), Truck Receiving/Unloading (EU-36 and EU-37), Rail Car Loading (EU-38B), Rail Car Receiving/Unloading (EU-38A), Marine Vessel Loading/Unloading (EU-34, EU-35A, EU-35B, and EU-56), storage silos (EU-38C and EU-40B), and Internal Grain Handling Operations (EU-42) shall not exceed 0% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)
75. **Visible Fugitive Emission Limit** – Visible fugitive emissions from the Truck Receiving/Unloading (EU-36 and EU-37), Rail Car Loading (EU-38B), Rail Car Receiving/Unloading (EU-38A) operations shall not exceed 5% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)
76. **Visible Fugitive Emission Limit** – Visible fugitive emissions from the Internal Grain Handling Operations (EU-42) and Column Grain Dryers process (EU-31 and EU-32) shall not exceed 0% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)
77. **Visible Fugitive Emission Limit** – Visible fugitive emissions from the Truck Loading (EU-33) operations shall not exceed 10% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)

78. **Visible Fugitive Emission Limit** – Visible fugitive emissions from the Marine Vessel Loading (EU-35A, EU-35B, and EU-56) operations shall not exceed 20% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)
79. **Visible Emission Limit** - Visible emissions from each boiler (B-1 through B-4) when using diesel fuel shall not exceed 10% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 20% opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.  
(9VAC5-80-1180 and 9VAC5-50-260)

### **MONITORING/TESTING**

80. **Emissions Testing** - The facility shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. This includes constructing the facility/equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.  
(9VAC5-50-30 F and 9VAC5-80-1180)
81. **Monitoring Device Observation** – To ensure good performance, each differential pressure gauge used to continuously measure the pressure drop across each fabric filter shall be observed by the permittee with a frequency of not less than once per week. The permittee shall keep a log of the observations including, but not limited to, the date, time, observation, observer's name, the acceptable range and, if needed, any corrective action taken (including, but not limited to, a brief description and date of completion of corrective action).  
(9VAC5-80-1180)
82. **Monitoring Device Observation** – An annual internal inspection shall be conducted on each cyclone in operation at the facility by the permittee to ensure structural integrity.  
(9VAC5-80-1180)
83. **Visible Emission Observations** –The permittee shall observe each emission unit listed in Conditions 71 through 79 for a minimum of least six (6) minutes at least once per week (Monday - Sunday) during daylight hours for visible emissions. If visible emissions are noted from a particular emission unit, operational adjustments or maintenance shall be performed on the associated units to eliminate the visible emissions. Should visible emissions continue after these actions have been undertaken, a visible emissions evaluation (VEE) shall be immediately conducted on the stack for at least six (6) minutes in accordance with Method 9 (40 CFR 60, Appendix A). If the VEE opacity average for the

stack exceeds the applicable value in the following list, the VEE shall continue for one (1) hour to determine compliance with the respective opacity limit:

- a. Conditions 74 and 76, the value is 0%;
- b. Conditions 71, 72, 73, and 75, the value is 5%;
- c. Conditions 77, and 79 the value is 10%; and
- d. Condition 78 the value is 20%.

If compliance is not demonstrated by this VEE, timely corrective action shall be taken to bring the unit back to compliance. Results of the visible observations and/or VEEs shall be recorded in an operation log. These records shall include, but are not limited to; the name of the observer, date and time of the observation, an indication of presence or absence of visible emissions, whether the emissions are representative of normal operation and if the emissions are not representative, the cause of the abnormal emissions, the duration of any visible emission incident, and any corrective action to eliminate visible emissions. If a VEE is conducted, records shall be in accordance with Method 9 (40 CFR 60, Appendix A). (9VAC5-80-1180 and 9VAC5-50-30 G)

## **RECORDKEEPING & REPORTING**

84. **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 Tidewater Regional Office. These records shall include, but are not limited to:
  - a. Annual throughput (in tons) of whole beans processed at the soybean oil extraction plant measured as throughput of the Compuweigh two garner scale (EU-45), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - b. Annual throughput of pellets (in tons) through the Pellet Cooler process (EU-23), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - c. Annual throughput of hulls (in tons) through Hull Truck Unloading process (EU-57), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
  - d. Records of the daily LDAR program required in Condition 15.
  - e. Results of all stack tests, visible emission evaluations and performance evaluations.

- f. Scheduled and unscheduled maintenance and operator training.
- g. Visible emission monitoring records required in Condition 83.
- h. Operation and control device monitoring records for pollution control technology as required in Conditions 81 and 82.
- i. Annual hours of operation of the engine-generator set (EG-1), calculated monthly as the sum of each consecutive 12 month period. Compliance for the consecutive 12 month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- j. Engine information including make, model, serial number, model year, maximum engine power (bhp), and engine displacement for the engine-generator set (EG-1).
- k. The manufacturer's written operating instructions or procedures, including those developed by the owner/operator that are approved by the engine manufacturer for the engine-generator set (EG-1).
- l. Records of the reasons for operation for the engine-generator set (EG-1), including, but not limited to, the date, cause of operation, cause of the emergency, the ISO-declared emergency notification, and the hours of operation.
- m. Annual total throughput of natural gas to the Column Grain Dryers (EU-31 and EU-32), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- n. Annual total throughput of grain and grain products (meal) through the Truck Receiving/Unloading process (EU-36 and EU-37), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- o. Annual throughput of grain and grain products (meal) through the Rail Car Receiving/Unloading process (EU-38A), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- p. Annual total throughput of grain through marine unloading (EU-34 and EU-56), calculated monthly as the sum of each consecutive 12-month period. Compliance for

the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- q. Annual throughput of grain and grain products (meal) through the Rail Car Loading process (EU-38B), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- r. Annual total throughput of grain and grain products (meal) through marine loading (EU-35A, EU-35B, and EU-56), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- s. Annual total throughput of grain through the Column Grain Dryer process (EU-31 and EU-32), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- t. Annual throughput of grain and grain products (meal) through the Internal Grain Handling process (EU-42), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. Internal Grain Handling throughput is calculated as the sum of the individual throughputs from records required in n, o, p, q, r, and v of Condition 84 and twice the throughput of 84.s.
- u. Annual throughput of grain and grain products (meal) through the Storage Silo process (EU-38C, EU-40B, and EU-48 through EU-53), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. Storage Silo process throughput is calculated as the sum of the individual throughputs from records required in n, o, p, and s of Condition 84.
- v. Annual throughput of grain and grain products (meal) through the Truck Loading process (EU-33), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- w. Monthly calculations of the SLR to demonstrate compliance with the requirements of Condition 33, including all supporting information for such calculations.
- x. Monthly emission calculations using calculation methods approved by the Tidewater Regional Office to verify compliance with each limitation in Conditions 65, 68, 69, and 70.
- y. Annual total throughput of natural gas to the Boilers (B-1, B-2, B-3, and B-4), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- z. Annual total throughput of diesel fuel to the Boilers (B-1, B-2, B-3, and B-4), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- aa. All fuel supplier certifications.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.  
(9VAC5-80-1180, 9VAC5-80-1985, and 9VAC5-50-50)

85. **Semiannual Fuel Quality Reports** – The permittee shall submit fuel quality reports to the Tidewater Regional Office, postmarked no later than the 30th day following the end of each semiannual period ending June 30th and December 31st. If no shipments of diesel fuel were received during the semiannual period, the fuel quality report shall consist of the dates included in the semiannual period and a statement that no diesel fuel was received during the semiannual period. If diesel fuel was received during the reporting period, the report shall include:
- a. The dates included in the semiannual period.
  - b. A copy of all fuel supplier certifications for all shipments of diesel fuel received during the reporting period, indicating the supplier, volume of shipment, sulfur content (weight percent) and date the shipment was received.
  - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications represent all of the diesel fuel received during the reporting period.

- d. One copy of the semiannual fuel report shall be submitted to:  
Associate Director  
Office of Air Enforcement and Compliance Assistance (3AP20)  
U. S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029  
(9VAC5-80-1180, 9VAC5-50-50, and 9VAC5-50-410)

## **NOTIFICATIONS**

86. **Initial Notifications** - The permittee shall furnish written notification to the Tidewater Regional Office of:
- a. The actual date on which construction of the new extractor (EU-14A) commenced within 30 days after such date;
  - b. The actual date of construction of each boiler B-1, B-2, B-3, and B-4 within 30 calendar days after such date; and
  - c. The actual first start-up date of each boiler B-1, B-2, B-3, and B-4 within 15 calendar days after such date.
  - d. The anticipated date of any performance tests of any boiler postmarked at least 30 days prior to such date.
  - e. The actual date on which startup of the new extractor (EU-14A) commenced within 30 days after such date.
  - f. The actual date on which start-up of each particulate control device required in this permit (Conditions 1 through 14, 17 through 24, and 28.e) within 30 days after such date or 30 days after issuance of this permit, whichever is later.

One (1) additional copy of the written notifications referenced in items b, c, and d above shall be sent to:

- Associate Director  
Office of Air Enforcement and Compliance Assistance (3AP20)  
U.S. Environmental Protection Agency  
Region III  
1650 Arch Street  
Philadelphia, PA 19103-2029  
(9VAC5-80-1180 and 9VAC5-50-50)

**GENERAL CONDITIONS**

87. **Permit Invalidation** – This permit to construct the project shall become invalid, unless an extension is granted by the DEQ, if:

- a. A program of continuous construction is not commenced within 18 months from the date of this permit.
- b. A program of construction is discontinued for a period of 18 months or more, or is not completed within a reasonable time, except for a DEQ approved period between phases of the phased construction of a new stationary source or project.

(9VAC5-80-1210)

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

- a. Knowingly makes material misstatements in the permit application 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 a permitted emissions unit;
- d. Causes emissions from the stationary source which result in violations of, or interfere with the attainment and maintenance of, any ambient air quality standard; or
- e. Fails to operate in conformance with any applicable control strategy, including any emission standards or emissions limitations, in the State Implementation Plan in effect at the time an application for this permit is submitted.

(9VAC5-80-1210 G)

89. **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.
  - e. 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. (9VAC5-170-130 and 9VAC5-80-1180)
90. **Maintenance/Operating Procedures** – At all times, including periods of start-up, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions. (9VAC5-50-20 E and 9VAC5-80-1180 D)
91. **Record of Malfunctions** – The permittee shall maintain records of the occurrence and duration of any bypass, malfunction, shutdown or failure of the facility or its associated air pollution control equipment that results in excess emissions for more than one hour. Records shall include the date, time, duration, description (emission unit, pollutant affected, cause), corrective action, preventive measures taken and name of person generating the record. (9VAC5-20-180 J and 9VAC5-80-1180 D)
92. **Notification for Facility or Control Equipment Malfunction** - The permittee shall furnish notification to the Tidewater Regional Office of malfunctions of the affected facility or related air pollution control equipment that may cause excess emissions for more than one hour. Such notification shall be made no 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 discovery of the malfunction. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the permittee shall notify the Tidewater Regional Office. (9VAC5-20-180 C and 9VAC5-80-1180)
93. **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. (9VAC5-20-180 I and 9VAC5-80-1180)
94. **Change of Ownership** - In the case of a transfer of ownership of a stationary source, the new owner shall abide by any current minor NSR permit issued to the previous owner. The new owner shall notify the Tidewater Regional Office of the change of ownership within 30 days of the transfer. (9VAC5-80-1240)

95. **Permit Copy** - The permittee shall keep a copy of this permit on the premises of the facility to which it applies.  
(9VAC5-80-1180)

## SOURCE TESTING REPORT FORMAT

### Report Cover

1. Plant name and location
2. Units tested at source (indicate Ref. No. used by source in permit or registration)
3. Test Dates
4. Tester; name, address and report date

### Certification

1. Signed by team leader/certified observer (include certification date)
2. Signed by responsible company official
3. \*Signed by reviewer

### Copy of approved test protocol

### Summary

1. Reason for testing
2. Test dates
3. Identification of unit tested & the maximum rated capacity
4. \*For each emission unit, a table showing:
  - a. Operating rate
  - b. Test Methods
  - c. Pollutants tested
  - d. Test results for each run and the run average
  - e. Pollutant standard or limit
5. Summarized process and control equipment data for each run and the average, as required by the test protocol
6. A statement that test was conducted in accordance with the test protocol or identification & discussion of deviations, including the likely impact on results
7. Any other important information

### Source Operation

1. Description of process and control devices
2. Process and control equipment flow diagram
3. Sampling port location and dimensioned cross section Attached protocol includes: sketch of stack (elevation view) showing sampling port locations, upstream and downstream flow disturbances and their distances from ports; and a sketch of stack (plan view) showing sampling ports, ducts entering the stack and stack diameter or dimensions

### Test Results

1. Detailed test results for each run
2. \*Sample calculations
3. \*Description of collected samples, to include audits when applicable

### Appendix

1. \*Raw production data
2. \*Raw field data
3. \*Laboratory reports
4. \*Chain of custody records for lab samples
5. \*Calibration procedures and results
6. Project participants and titles
7. Observers' names (industry and agency)
8. Related correspondence
9. Standard procedures

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\* Not applicable to visible emission evaluations