Lawrence J. Hoga Governor Boyd K. Rutherfo Lieutenant Gover	State of	Maryla	Ben Grumbles Secretary
	1800 Washington 1	HE ENVIRONMENT hagement Administration Boulevard, Suite 720, MD 21230	
	Construction Permit	Part 70 X Operating	g Permit
PERMIT NO.	24-045-0042	DATE ISSUED	July 1, 2015
PERMIT FEE	To be paid in accordance with COMAR 26.11.02.19B(b)	EXPIRATION DATE	June 30, 2020
Perdue Agribusin 6906 Zion Churc Salisbury, MD 2	h Road	Zion Chu	orich Road Complex omico County AI#2087
	SOURCE D	DESCRIPTION	
One commercial	poultry product and soybean processi	ng plant.	
т	his source is subject to the condit	ions described on the attac	ched pages.
Ki No		1 of 135 Junely Se	lamer
Program Manager		Director, Air and Radiation	Management Administration

## **BACKGROUND**

## Owner/Operator and Facility Information:

Perdue Agribusiness LLC (Perdue) Zion Church Road Complex 6906 Zion Church Road Salisbury, Maryland 21802 Wicomico County, Maryland Air Quality Region VI

## Major Business Activities and Associated SIC/NAICS:

Grain receiving, drying, cleaning, and storage – SIC No. 5153 Production of animal feeds – SIC No. 2048 Soybean preparation and soybean oil extraction using hexane – SIC No. 2075 Vegetable oil refining – SIC No. 2079

### Types of Equipment:

Equipment at the facility includes grain silos, vertical grain dryers, grain scalpers, cracking and dehulling equipment, hammermills, flaking rolls, meal dryers, solvent recovery equipment (e.g., evaporators, condensers), pellet mills, grain handling equipment, boilers, and emergency generators.

### Types of Raw Materials and Final Products Manufactured:

Raw materials include corn, soybeans, and other grains and oilseeds, and crude vegetable oils. Products include feed for poultry houses, refined soybean oil and other vegetable oils.

The following table summarizes the actual emissions from Perdue based on its Annual Emission Certification Reports:

**Table 1: Actual Emissions** 

Year	NO <sub>x</sub> (TPY)	SO <sub>x</sub> (TPY)	PM <sub>10</sub> (TPY)	CO (TPY)	VOC (TPY)	Total HAP
	(****)	(111)	(****)	(** *)	(****)	(TPY)
2013	44	<1	281	11	232	109
2012	53	<1	235	13	261	133
2011	49	1	214	13	226	112
2010	54	1.4	164	13	268	129
2009	51	16	164	13	252	128

The major source thresholds for triggering Title V permitting requirements in Wicomico County are 50 tons per year for VOC, 100 tons for NOx, and 100 tons per year for any other criteria pollutants and 10 tons for a single HAP or 25 tons per year for total HAP. Since the actual VOC, HAP, and PM<sub>10</sub> and potential NOx emissions from the facility are greater than the major source thresholds for each pollutant, Perdue is required to obtain a Title V – Part 70 Operating Permit under COMAR 26.11.03.01.

Perdue's current Title V – Part 70 Operating Permit was issued on August 1, 2010 and expires on June 30, 2015. The renewal Title V – Operating Permit will be issued to replace the current permit. The facility's Title V – Part 70 Operating Permit renewal application was received by the Department on July 2, 2014. An administrative completeness review was conducted and the application was deemed administratively complete. An administrative completeness letter was sent on July 16, 2014 granting Perdue an application shield.

## **GREENHOUSE GAS (GHG) EMISSIONS**

Perdue emits the following greenhouse gases (GHG) related to Clean Air Act requirements: carbon dioxide, methane, and nitrous oxide. These GHG originate from fuel burning equipment at Perdue. The facility has not triggered Prevention of Significant Deterioration (PSD) requirements for GHG emissions; therefore, there are no applicable GHG Clean Air Act requirements. While there may be no applicable requirements as a result of PSD, emission certification reports for the years 2011, 2012, and 2013 showed that Perdue is a minor source of GHG (major source threshold = 100,000 tpy  $CO_2e$ ). The Permittee shall quantify facility wide GHG emissions and report them in accordance with Section 3 of the Part 70 permit.

The following table summarizes the actual emissions from Perdue based on its Annual Emission Certification Reports:

**Table 2: Greenhouse Gases Emissions Summary** 

GHG	Conversion factor	<b>2011</b> tpy CO <sub>2</sub> e	<b>2012</b> tpy CO <sub>2</sub> e	<b>2013</b> tpy CO <sub>2</sub> e
Carbon dioxide CO <sub>2</sub>	1	42,128	45,445	37,352
Methane CH <sub>4</sub>	25	20	330	18
Nitrous Oxide N <sub>2</sub> O	300	231	240	210
Total GHG	CO <sub>2eq</sub>	42,379	46,015	37,580

# **EMISSION UNIT IDENTIFICATION**

Perdue has identified the following emission units as being subject to Title V permitting requirements and having applicable requirements.

**Table 3: Emission Unit Identification** 

Emissions Unit Number	MDE/ARMA Registration Number 045-0042-	Emissions Unit Name and Description	Date of Installation		
	T	MAIN BOILER ROOM			
BR-1 (NSPS)	4-0245	800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800A	09/2008		
BR-3 (NSPS)	4-0246	800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800B	09/2008		
BR-4 (NSPS)	4-0244	800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800C	09/2008		
BR-5 (NSPS)	5-0117	800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800D	07/2015		
		VEGETABLE OIL REFINERY			
OR-1	5-0002	700-HP (29 MMBtu/hr) Cleaver Brooks® boiler fired with natural gas, No. 2 fuel oil, and/or No. 6 fuel oil	09/1985		
OR-5	8-0052	Clay Transfer Silo controlled by a MAC Environmental® Bag Filter	03/1985		
OR-6	8-0052	Clay Storage Silo controlled by a MAC Environmental® Bag Filter	09/1985		
OR-8	8-0052	DeSmet® Crude Vegetable Oil Deodorizing Unit	06/2011		
OR-9	5-0109	Newpoint NUK® 5.85 MMBtu/hr, high-pressure steam generator (HPSG) fired with natural gas or propane	06/2011		
HATCHERIES					
HAT-1	5-0084	1.99 MMBtu/hr Laars® hot water heater fired with natural gas, located at the facility's Hatchery No. 3	2006		
SOYBEAN PROCESSING PLANT					
SP-1	8-0084	Two (2) Cantrell® Double Series Shakers, 11 tons/hr each, (Cracking and Dehulling, Primary Tables 5 & 6), controlled by a MAC Environmental® Baghouse	01/1987		
SP-2	8-0084	Two (2) Cantrell® Double Series Shakers, 11 tons/hr each, (Cracking and Dehulling, Primary Tables 3 & 4), controlled by a MAC Environmental® Baghouse	01/1987		

Emissions Unit Number	MDE/ARMA Registration Number 045-0042-	Emissions Unit Name and Description	Date of Installation	
SP-3	8-0084	Two (2) Cantrell® Double Series Shakers, 11 tons/hr each, (Cracking and Dehulling, Primary Tables 1 & 2), controlled by a MAC Environmental® Baghouse	01/1987	
SP-4	8-0084	Two (2) Champion/Roskamp® Meal Grinders (20" X 44" Magnum Model Hammermills), and two (2) Sifters (60" X 30" Gyrosifters), 31.5 tons/hr input each, controlled by a MAC Environmental® Baghouse	01/1987	
SP-5 (NSPS)	8-0084	Rotex® Model 536 Whole Bean Cleaner (Scalper), 89 tons/hr, and Storage Tanks controlled by a MAC Environmental® Baghouse	01/1987	
SP-6	8-0084	Six (6) Roskamp® Flaking Rolls, 14.5 tons/hr each, controlled by a MAC Environmental® High Efficiency Cyclone Collector	01/1995	
SP-7	8-0084	Two (2) Fluidized Bed Separators for aspiration of Secondary Table, 15 tons/hr each, controlled by a MAC Environmental® baghouse	01/1987	
SP-8	8-0084	Two (2) Champion/Roskamp® 20" X 40" Magnum Model Hammermill Hull Grinders controlled by a MAC Environmental® baghouse	01/1987	
SP-13	8-0084	French Industries® Soybean Meal Dryer/Cooler, 67 tons/hr, controlled by three (3) Kice® CK-90 cyclones (subject to CAM)	06/1995	
SP-16 (MACT)	8-0084	Soybean Oil Extraction Process, controlled by condensers, and a French Oil Machinery Company® mineral oil scrubber (final vent)	01/1987	
SP-18	8-0084	Meal/Hull Loadout Area controlled by a Pneumafil® baghouse (subject to CAM)	05/1999	
SP-19	8-0084	Four (4) Roskamp® P-12 10 X 52 (two pair high) Cracking Mills controlled by a MAC Environmental® 96 MWP 212-160 baghouse	01/1987	
SP-20	8-0084	Raw Dry Soybean Conveyances Controlled by one (1) Kice® Baghouse.	01/1987 baghouse installed 2015	
FEEDMILL EQUIPMENT				
FM-1	8-0086	Bulk Ingredient Rail Dump Pit, 70 tons/hr, uncontrolled	01/1972	
FM-2	8-0086	Bulk Ingredient Truck Dump Pit, 70 tons/hr, uncontrolled, small liquid loading only	01/1972	
FM-3	8-0096	Champion® HM44-48 Hammermill, 60 tons/hr, controlled by an Alanca Environmental® 264LS baghouse	05/2007	
FM-4	8-0096	Champion® HM44-48 Hammermill, 60 tons/hr,	05/2007	

Emissions Unit Number	MDE/ARMA Registration Number 045-0042-	Emissions Unit Name and Description	Date of Installation
		controlled by an Alanca Environmental® 264LS	
		baghouse (unconfined source)	
FM-6	8-0086	Three (3) Finished Feed Storage Silos, no controls	01/1964
FM-8	8-0086	DL Methionine Storage Tank controlled by an Alanca Environmental® baghouse (subject to CAM)	01/1964
FM-9	8-0086	Pellet Mill Line No. 1 with three (3) Aircon® cyclones, 70 tons/hr input	12/2005
FM-10	8-0086	Pellet Mill Line No. 2 with three (3) Aircon® cyclones, 30 tons/hr input	01/1964
FM-11	8-0086	Pellet Mill Line No. 3 with two (2) MAC Environmental® High Efficiency Cyclones, 20 tons/hr input	01/1964
FM-12	8-0086	Finished Feed Loadout, 70 tons/hr input, animal fat used as dust suppressant (unconfined source)	01/1964
FM-13	8-0086	Ingredient Mixer and Material Handling Equipment controlled by a MAC Environmental® baghouse (subject to CAM)	01/1964
FM-14	8-0086	Ingredient Storage Bins/Silo controlled by bin vent filters	01/1964
FM-15	8-0086	Salt Storage Silo controlled by bin vent filters	01/1964
FM-16	8-0086	Meal Storage Silo controlled by bin vent filters	01/1964
		GRAIN RECEIVING	
GS-1	8-0085	84 tons/hr Zimmerman® Column Grain Dryer, fired with propane and/or natural gas, equipped with screens	01/1975
GS-2	8-0085	Two (2) Shanzer® Column Grain Dryers (Nos. 4 &	08/1965
(NSPS)		5), 64.22 tons/hr each, each fired with propane and/or natural gas, equipped with screens	reconstructed 08/1981
GS-3 (NSPS)	8-0085	Marot® Grain Cleaning Scalper for Dryers 4 & 5, controlled by a MAC Environmental® 14MW-252 baghouse (BH-1) (subject to CAM)	01/1995
GS-4 (NSPS)	8-0085	Two (2) Shanzer® Column Grain Dryers (Nos. 2 & 3), 64.22 tons/hr each, each fired with propane and/or natural gas, equipped with screens	08/1965 reconstructed 08/1981
GS-5 (NSPS)	8-0085	Marot® Grain Cleaning Scalper for Dryers 2 & 3, controlled by a MAC Environmental® 14MW-252 baghouse (BH-1) (subject to CAM)	01/1995
GS-6 (NSPS)	8-0085	Two (2) Shanzer® Column Grain Dryers (Nos. 6 & 7), 64.22 tons/hr each, each fired with propane and/or natural gas, equipped with screens	08/1965 reconstructed 08/1982
GS-7 (NSPS)	8-0085	Marot® Grain Cleaning Scalper for Dryers 6 & 7, controlled by a MAC Environmental® 14MW-212 baghouse (BH-2) (subject to CAM)	01/1995
GS-8	8-0085	Grain Receiving Truck Pit No. 3 controlled by a MAC Environmental® 14 MW-252 baghouse (BH-1)	1960

Emissions Unit Number	MDE/ARMA Registration Number 045-0042-	Emissions Unit Name and Description	Date of Installation
		(subject to CAM)	
GS-9	8-0085	Grain Receiving Truck Pit No. 4 controlled by a MAC Environmental® 14 MW-252 baghouse (BH-1) (subject to CAM)	1960
GS-10	8-0085	Grain Receiving Truck Pit No. 2 controlled by a MAC Environmental® 14 MW-212 baghouse (BH-2) (subject to CAM)	1960
GS-11	8-0085	Grain Receiving Truck Pit No. 1 controlled by a MAC Environmental® 14 MW-212 baghouse (BH-2) (subject to CAM)	1960
GS-12 (NSPS)	8-0085	Grain Handling System comprising Bucket Elevators and Covered Belts with an Oil Spray System	01/1982
GS-13	8-0085	Grain Load Out Chute by Truck Dump Pit Nos. 1 and 2	08/1965
GS-14 (NSPS)	8-0085	Grain Load Out Chute by Truck Dump Pit Nos. 3 and 4	08/1981
GS-15 (NSPS)	8-0085	Grain Load Out Chute from Grain Tank No. 7	01/1995
GS-16 (NSPS)	8-0085	Grain Load Out Rail Chute	01/1995
	INTERNAL COMI	BUSTION ENGINES (EMERGENCY GENERATORS)	
EG-1	9-0077	1095-HP Emergency Generator fired with No. 2 fuel oil	06/1993
EG-2	9-0078	1095-HP Emergency Generator fired with No. 2 fuel oil	06/1993 (rebuilt injectors in 2012)
EG-3	9-0132	1825-kW Portable Emergency Generator fired with No. 2 fuel oil	2004
EG-4 (NSPS)	9-0149	600-kW 2007 Model Year KATOLIGHT (Model D600FRY4T2) diesel powered Emergency Generator (provides emergency power to facility's Main Boiler Room)	10/2009

# **APPLICABILITY OF FEDERAL REGULATIONS**

# **NSR Applicability**

None of Perdue's operations are subject to NSR approval. However, to preclude applicability of non-attainment NSR requirements, collective NOx emissions from four boilers in the Main Boiler Room (Emission Units BR-1, BR-2, BR-3, and BR-4)

are subject to a synthetic minor emissions limit of 127.6 tons of NOx in all periods of 12 consecutive months. BR-2 was removed from the facility in 2015, so the limit now applies to BR-1, BR-3, and BR-4 only.

## **PSD Applicability**

None of Perdue's operations are subject to PSD approval.

# NSPS Applicability

- 40 CFR 60, Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Boilers) applies to each of the four boilers in the Main Boiler Room with a maximum rated heat input of 10 MMBtu/hr or greater and constructed, modified, or reconstructed after June 9, 1989.
- 40 CFR 60, Subpart DD (NSPS for Grain Elevators) applies to the facility's column dryers and grain handling equipment constructed, modified, or reconstructed after August 3, 1978.
- 40 CFR 60, Subpart IIII (NSPS for Stationary CI RICE) applies to the emergency generator installed in 2009.

### **NESHAP/MACT Applicability**

Perdue is a major source of HAP emissions subject to the following NESHAP requirements for major sources:

- 40 CFR 63, Subpart GGGG (NESHAP for Solvent Extraction for Vegetable Oil Production) applies to the facility's soybean oil extraction processes.
- 40 CFR 63, Subpart ZZZZ (NESHAP for Stationary Reciprocating RICE) applies to all of the facility's emergency generators.
- 40 CFR 63, Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters at Major Sources) applies to the facility's boilers.

### CAM APPLICABILITY

Compliance Assurance Monitoring (CAM), as specified in 40 CFR, Part 64, applies to any emission unit at a Title V major source that meets all of the following criteria:

 The emission unit is subject to a federally enforceable emission limit or standard for a regulated pollutant;

- (2) The emission unit uses a control device to achieve compliance with any such emission limitation or standard; and
- (3) The emission unit has the potential to emit pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year required for a source to be classified as a major source and must not otherwise be exempt from CAM.

Compliance Assurance Monitoring (CAM) requirements, as promulgated under 40 CFR 64, apply to each of the following particulate air pollution control devices:

- 3 Kice® cyclones associated with emissions unit SP-13, which is a 67 tons-perhour soybean meal dryer/cooler;
- 1 Pneumafil® baghouse associated with emissions unit SP-18, which is a soybean meal/hull loadout area;
- 1 Alanca Environmental® baghouse associated with emissions unit FM-8, which is a DL Methionine storage tank;
- 1 MAC Environmental® baghouse associated with emissions unit FM-13, which comprises feed mill ingredient mixing and materials handling equipment;
- 1 MAC Environmental® baghouse (BH-1) associated with emissions units GS-3 (a Marot® grain cleaning scalper for dryers 4 & 5), GS-5 (a Marot® grain cleaning scalper for dryers 2 & 3), GS-8 (grain receiving truck pit no. 3) and GS-9 (grain receiving truck pit no. 4).
- 1 MAC Environmental® baghouse (BH-2) associated with emissions units GS-7 (a Marot® grain cleaning scalper for dryers 6 & 7), GS-10 (grain receiving truck pit no. 2) and GS-11 (grain receiving truck pit no. 1).

CAM requirements do not apply to HAP/VOC control devices associated with the facility's soybean oil extraction plant (SOEP) because the SOEP is subject to the major-source NESHAP rule promulgated under 40 CFR 63, Subpart GGGG for "Solvent Extraction for Vegetable Oil Production".

## CHANGES SINCE THE ISSUANCE OF THE LAST PERMIT

The following changes have occurred at the facility since the issuance of the last Title V – Part 70 Operating Permit:

- Permit to Construct No. 045-0042-8-0084 issued on May 19, 2010 for modifications and upgrades to the facility's existing hexane recovery system associated with the SOEP.
- Permit to Construct No. 045-0042-5-0108 issued on December 15, 2010 for the installation of a temporary boiler. This boiler has been removed from the facility.
- Permit to Construct No. 045-0042-5-0109 and 8-0052 issued on June 21, 2011 for the installation of one (1) De Smet® crude vegetable oil deodorizing unit and one (1) Newpoint NUK® high-pressure steam generator (HPSG) with a rated heat input capacity of 5.85 MMBtu/hr to replace existing equipment.
- Permit to Construct No. 045-0042-8-0084 issued on February 15, 2013 for the installation of one (1) new desolventizing toaster to replace an existing unit in the SOEP.
- Permit to Construct Nos. 045-0042-5-0117 and 8-0084 issued in May 2015 for the installation of one (1) new natural gas fired (No. 2 or No. 6 fuel oil as back up) boiler (BR-5) in the Main Boiler Room and the installation of one (1) baghouse to control emissions from Raw Dry Soybean Conveyances (SP-20) in the Soybean Processing Plant. This boiler replaces BR-2 (045-0042-4-0186) which has been removed from the facility.
- All boilers associated with the Research Farms (Emission Units RF-1 through RF-6, ARMA Registration Nos. 045-0042-4-0187 through 4-0192) have been removed from the facility.
- The boiler associated with the Vegetable Oil Refinery (Emission Unit OR-2, ARMA Registration No. 045-0042-5-0001) has been removed from the facility.

### **AN OVERVIEW OF THE PART 70 PERMIT**

The Fact Sheet is an informational document. If there are any discrepancies between the Fact Sheet and the Part 70 permit, the Part 70 permit is the enforceable document.

Section I of the Part 70 Permit contains a brief description of the facility and an inventory list of the emissions units for which applicable requirements are identified in Section IV of the permit.

Section II of the Part 70 Permit contains the general requirements that relate to administrative permit actions. This section includes the procedures for renewing, amending, reopening, and transferring permits, the relationship to permits to construct and approvals, and the general duty to provide information and to comply with all applicable requirements.

Section III of the Part 70 Permit contains the general requirements for testing, record keeping and reporting; and requirements that affect the facility as a whole, such as open burning, air pollution episodes, particulate matter from construction and demolition activities, asbestos provisions, ozone depleting substance provisions, general conformity, and acid rain permit. This section includes the requirement to report excess emissions and deviations, to submit an annual emissions certification report and an annual compliance certification report, and results of sampling and testing.

Section IV of the Part 70 Permit identifies the emissions standards, emissions limitations, operational limitations, and work practices applicable to each emissions unit located at the facility. For each standard, limitation, and work practice, the permit identifies the basis upon which the Permittee will demonstrate compliance. The basis will include testing, monitoring, record keeping, and reporting requirements. The demonstration may include one or more of these methods.

Section V of the Part 70 Permit contains a list of insignificant activities. These activities emit very small quantities of regulated air pollutants and do not require a permit to construct or registration with the Department. For insignificant activities that are subject to a requirement under the Clean Air Act, the requirement is listed under the activity.

Section VI of the Part 70 Permit contains State-only enforceable requirements. Section VI identifies requirements that are not based on the Clean Air Act, but solely on Maryland air pollution regulations. These requirements generally relate to the prevention of nuisances and implementation of Maryland's Air Toxics Program.

### REGULATORY REVIEW/TECHNICAL REVIEW/COMPLIANCE METHODOLOGY

## Table IV – 1 (General Provisions for Section IV)

# 1.0 General Provisions Within Plant Specific Requirements:

This table provides generally applicable provisions with regard to requirements for observations for visible emissions, preparation of operations and maintenance plans, preparation of best management practice plans for unconfined sources, stack testing, record keeping and reporting. Provisions included in this table will be referenced in succeeding tables in this section when such provisions are applicable. Provisions in this table may also be superseded or modified by requirements in succeeding tables in this section.

### INDEX:

- 1.1 Observations For Visible Emissions
- 1.2 Operations and Maintenance Plans
- 1.3 Best Management Practices Plans For Unconfined Sources
- 1.4 Performance Test Protocols
- 1.5 Record Keeping and Reporting

### **1.1** Observations For Visible Emissions:

Unless otherwise provided in the specific requirements for an affected emissions unit or emissions point, whenever the Permittee is required to perform an observation for visible emissions the following shall apply:

- (A) Each required observation of an emissions point shall be performed when the affected source of emissions is in operation. If the affected source of emissions does not operate within the period during which an observation would otherwise be required, the Permittee shall not be required to make an observation of the emissions point for that period.
- (B) If the Permittee is required to observe an emissions point that is common to more than one source of emissions, the Permittee shall make the required observation when at least one of the sources of emissions is in operation. If none of the affected sources of emissions operate within the period during which an observation would otherwise be required, the Permittee shall not be required to make an observation of the emissions point for that period.

# Table IV – 1 (General Provisions for Section IV)

- (C) Observations shall be performed during daylight hours unless the Permittee obtains from the Department written approval to conduct observations of properly lighted emissions points during non-daylight hours.
- (D) Excepting observations for visible emissions from exhaust stacks on fuel burning equipment, each required observation for visible emissions shall endure for at least one (1) minute unless a longer duration is specified in the Part 70 operating permit condition that requires the observation. Required observations for visible emissions from exhaust stacks on fuel burning equipment (e.g., boilers, thermal oil heaters) shall be performed in accordance with Method 9 and shall endure for at least 18 minutes unless a different duration is specified in the Part 70 permit condition that requires the observation.
- (E) The Permittee shall make a written or printable electronic record of each required observation for visible emissions, and each such record shall include identification of the observer, the date of the observation, the time at the start of the observation, the time at the end of the observation if the observation endures for more than 1 minute, and an account of the observer's findings during performance of the observation.

[Authority: COMAR 26.11.03.06C]

### **1.2** Operations and Maintenance Plans:

Unless otherwise provided in the specific requirements for an emissions unit or plant, whenever the Permittee is required to develop and implement an operations and maintenance (O&M) plan, the plan shall include at minimum:

(A) Information that is sufficient to demonstrate that air emissions from each affected emissions unit can be expected to comply with all applicable standards and limits during periods of normal operation. Examples of types of information that could be included to support the required demonstrations would be design criteria, vendor specifications and performance guarantees, approved computer modeling studies, and results of testing programs in which approved test methods and procedures were utilized;

# Table IV – 1 (General Provisions for Section IV)

- (B) Procedures that provide for proper operation and maintenance (including preventive maintenance) of all affected emissions units and air pollution control equipment associated with the source;
- (C) Provisions for periodic monitoring of operating parameters and emissions as necessary to determine that affected emissions units and air pollution control equipment are functioning properly;
- (D) Provisions for periodic inspections, to be conducted at least as frequently as once per month, to determine whether responsible persons are complying with the provisions and procedures included in the required O&M plan;
- (E) Descriptions of procedures to be followed and corrective actions to be taken when inspections or monitoring information indicate that an emissions unit or pollution control device is not functioning properly; and
- (F) Provisions for developing written or printable electronic records that show whether prescribed operating, maintenance and monitoring procedures are consistently followed, and whether timely and appropriate corrective actions are taken when malfunctions occur.

[Authority: COMAR 26.11.03.06C]

## **1.3** Best Management Practices Plans For Unconfined Sources:

Unless otherwise provided in the specific requirements for an emissions unit, whenever the Permittee is required to develop and implement a best management practices (BMP) plan for control of particulate emissions from an unconfined source, such plan shall identify all reasonable precautions to be implemented to prevent particulate matter from becoming airborne. Such reasonable precautions shall include:

(1) Housekeeping measures to minimize excess dust, including (a) using either an industrial vacuum system or manual sweeping to reduce the amount of dust; (b) at least once per month, removing dust from walls, ledges, and equipment using low pressure air or other means, and then sweeping or vacuuming the area; and (c) keeping exterior doors in the immediate affected areas shut except during normal ingress and

## Table IV – 1 (General Provisions for Section IV)

egress, as practicable.

- (2) Maintaining and operating all process equipment in accordance with manufacturer's specifications and in a manner to minimize dust creation.
- (3) Storing raw materials in closed containers, as practicable.
- (4) Keeping mixers covered when mixing is occurring except when materials are added to the mixer.
- (5) For bulk loading processes where materials are loaded into trucks or railcars, lessen fugitive emissions by reducing the distance between the loadout spout and the vehicle being loaded by using a device of any kind at the bulk loadout spout that minimizes the distance to the vehicle being loaded, or using any other means to minimize the distance between the loadout spout and the vehicle being loaded.

The BMP plan shall include provisions for periodic inspections, to be conducted at least once per month, to determine whether reasonable precautions identified in the plan are consistently employed.

[Authority: COMAR 26.11.03.06C, COMAR 26.11.06.03C(1), and COMAR 26.11.06.03C]

## **1.4** Performance Test Protocols:

- (A) Unless otherwise provided in the specific requirements for an emissions unit or emissions point, when the Permittee is required to perform stack testing the Permittee shall submit to the Department for approval a stack test protocol that includes:
  - (1) the purpose of the stack testing;
  - (2) a testing schedule that provides the projected dates and times of testing;
  - (3) an account of all test methods and procedures to be employed during the testing program;
  - (4) for the emissions source or sources to be tested, an account of the operating conditions that will be extant during the testing program;

# Table IV – 1 (General Provisions for Section IV)

- (5) for fuel burning sources, identification of the types of fuels that will be burned during the testing periods; and
- (6) identification of operating data that will be collected during the testing periods.
- (B) The required stack test protocol shall be submitted at least 30 days prior to performance of any testing, and testing shall not be conducted before the Department provides approval of the protocol.
- (C) Results of all required stack tests shall be submitted to the Department in writing within 60 days of completion of the testing.

[Authority: COMAR 26.11.03.06G]

# **1.5** Record Keeping and Reporting Requirements:

- (A) Unless otherwise provided in the specific requirements for an emissions unit or emissions point, the Permittee shall maintain at the facility for at least five (5) years, and shall make available to the Department upon request, all records that the Permittee is required by this Part 70 operating permit to establish.
- (B) Records required by this Part 70 operating permit shall be maintained in a format that is acceptable to the Department. A format adopted by the Permittee shall be considered acceptable until the Department provides the Permittee with written notice otherwise.
- (C) Unless otherwise specified in this Part 70 operating permit required records shall be maintained either in writing or in a printable electronic form.

[Authority: COMAR 26.11.03.06C]

# <u>Table IV – 2 (Main Boiler Room)</u> – Emission Units BR-1, BR-3, BR-4 and BR-5

**BR-1:** 800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800A, installed in 2008, ARMA Registration No. 045-0042-4-0245, subject to 40 CFR 60, Subpart Dc.

- **BR-3:** 800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800B, installed in 2008, ARMA Registration No. 045-0042-4-0246, subject to 40 CFR 60, Subpart Dc.
- **BR-4:** 800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800C, installed in 2008, ARMA Registration No. 045-0042-4-0244, subject to 40 CFR 60, Subpart Dc.
- **BR-5:** 800-HP (32.659 MMBtu/hr) Cleaver Brooks® boiler fired with interruptible natural gas, No. 2 fuel oil and/or No. 6 fuel oil; Permittee No. 800D, installed in 2015, ARMA Registration No. 045-0042-5-0117, subject to 40 CFR 60, Subpart Dc.

## **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- To preclude applicability of non-attainment NSR requirements, collective NO<sub>x</sub> emissions from BR-1, BR-3, and BR-4 are subject to a synthetic minor emissions limit of 127.6 tons NO<sub>x</sub> in all periods of 12 consecutive months. The limit may in the future be adjusted for demand growth if the company submits to the Department an approvable demonstration that justifies such an adjustment.
- All of the emissions units are subject to 40 CFR 60, Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units).
- Each of the emissions units is subject to 40 CFR 63, Subpart DDDDD
   (NESHAP for Industrial, Commercial, and Institutional Boilers and Process
   Heaters operated at facilities that are major sources of HAP). The final
   NESHAP rule was promulgated on January 31, 2013. Existing boilers (boilers
   constructed June 4, 2010 or earlier) must comply with the NESHAP no later
   than January 31, 2016, BR-5, a new boiler, must comply with the NESHAP
   upon startup.

None of the emissions units are subject to Compliance Assurance Monitoring (CAM) requirements because none are equipped with an air pollution control device.

# **Applicable Standards and Limits:**

## A. General Requirements

Emissions units BR-1, BR-3, BR-4 and BR-5 shall burn only natural gas except during periods of gas curtailment or gas supply interruptions of any duration as defined in 40 CFR §63.7575. No. 2 and/or No. 6 fuel oil may be burned only during periods of gas curtailment or gas supply interruptions or for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year. [Authority: 40 CFR §63.7575]

# Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

All four (4) boilers are considered natural gas boilers with respect to the boiler NESHAP, 40 CFR 63, Subpart DDDDD. To comply with the requirement the Permittee shall:

- maintain a copy of the interruptible natural gas service contract that the Permittee is required by the Part 70 operating permit to maintain with a utility company under the jurisdiction of the Maryland Public Service Commission;
- maintain records of all periods during which the Permittee's natural gas service was interrupted or curtailed; and
- maintain records of all fuels burned in the boilers during periods when natural gas was available, and records of all fuels burned in the boilers when natural gas service was interrupted or curtailed.

The applicable requirement limits the types of fuels that may be burned and when the fuels may be burned in the emissions units. Records of utility contracts, periods of when natural gas was interrupted or curtailed, and fuel usage are sufficient to demonstrate compliance. The records must also be made available to the Department upon request for compliance review.

### B. Visible Emissions Limitations

B1. The Permittee shall limit the opacity of exhaust gases to not more than 20 percent.

<u>Exceptions</u>: The opacity standard stated in this condition does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. [Authority: COMAR 26.11.09.05A(1) and COMAR 26.11.09.05A(3)]

B2. Except during periods of start up, shut down, or malfunction, when the Permittee is burning fuel oil in a boiler the Permittee shall operate the unit so that the opacity of any exhaust gases does not exceed 20 percent on a 6-minute average, except for one (1) 6-minute period per hour of not more than 27 percent. [Authority: 40 CFR §60.43c(c) and (d)]

### Compliance Demonstration

- For each of emissions units BR-1, BR-3, BR-4 and BR-5, the Permittee shall establish in writing, revise as necessary and implement an operations and maintenance (O&M) plan developed and implemented in accordance with Section 1.2 of Table IV-1 of this Part 70 operating permit. [Authority: COMAR 26.11.03.06C]
- The Permittee shall submit to the Department for approval a written site-specific monitoring plan that includes procedures and criteria for establishing and monitoring specific parameters for the boilers indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the Department may require as an alternative to the notification and reporting requirements specified in 40 CFR §§60.8 and 60.11 that the Permittee submit any deviations with the excess emissions report required under 40 CFR §60.48c(c). [Authority: 40 CFR §60.47c(f)(3)] Such site-specific monitoring plan may be included in the required O&M plan.
- Subpart Dc was amended in 2009, 2011, and 2012 to require a continuous opacity monitoring system (COMS) for oil-fired boilers rated at 30 MMBtu/hr or greater. In lieu of a COMS, for boilers that only burn oil containing no more than 0.5 weight percent sulfur, the Permittee may operate under an approved site-specific monitoring plan as specified 40 CFR §60.47c(f)(3). [Note: The site-specific monitoring plan requirement in 40 CFR §60.47c(f)(3) was originally listed in 40 CFR §60.47c(g) in the 2009 and 2011 amendments. In the 2009 and 2011 amendments, 40 CFR §60.47c(a) clearly states that sources operating under an approved site-specific monitoring plan allowed in 40 CFR §60.47c(g) meet the compliance demonstration requirements for

opacity in lieu of using a COMS or conducting prescribed periodic observations in 40 CFR §60.47c(a).

When the requirement was moved to 40 CFR §60.47c(f)(3) in the 2012 amendments, 40 CFR §60.47c(a) was not amended to continue to exclude sources operating under an approved site-specific monitoring plan from prescribed periodic observations. As this appears to be a clerical error in the 2012 amendments, the requirement to conduct prescribed periodic observations under 40 CFR §60.47c(a) is not included in the permit.

## Rationale for Periodic Monitoring Strategy

All of the boilers burn natural gas as a primary fuel with distillate or residual oil as a back up fuel only when natural gas is unavailable. All of the boilers are required to be operated and maintained in accordance with an O&M plan. Properly operated and maintained boilers will rarely cause visible emissions when burning natural gas or No. 2 fuel oil. The Permittee operates the boilers under an approved site-specific monitoring plan specifically allowed by 40 CFR 60, Subpart Dc when burning oil for units not equipped with a COMS. No additional periodic monitoring is required.

## C. Control of Particulate

- C1. The Permittee shall not cause or permit particulate matter caused by the combustion of residual oil to be discharged into the atmosphere in excess of the amounts shown in Figure 2 of COMAR 26.11.09.09. [Authority: COMAR 26.11.09.06A(2)]
- C2. Installations that burn oil with a sulfur content that does not exceed 0.5 percent by weight are <u>not</u> subject to the particulate emissions limit established in 40 CFR 60, Subpart Dc. [Authority: 40 CFR §60.43c(e)(4)]

### Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is not required to conduct specific periodic monitoring to demonstrate compliance with the particulate emissions standard because compliance can be demonstrated through the use of emissions factors and permit limits. The maximum allowable sulfur content for any No. 6 fuel oil burned in emissions units BR-1, BR-3, BR-4 and BR-5 is not more than 0.5 percent by weight, and the AP-42 emissions factor for particulate from combustion of no. 6 fuel oil with a sulfur content of 0.5 weight percent is approximately 7.8 pounds of particulate per 1,000 gallons of No. 6 fuel oil burned. Assuming a heating value of 147,000 Btu/gal for No. 6 fuel oil, the AP-42 emissions factor converts to about

0.05 pounds particulate per million Btu heat input. For each of emissions units, the regulatory standard is about 0.365 pounds per million Btu heat input. The maximum emissions rate predicted by the AP-42 emissions factor is appreciably less than that allowed by the standard.

## D. Control of Sulfur Oxides

- D1. The Permittee shall not burn, sell, or make available for sale any distillate fuel oil with a sulfur content in excess of 0.3 percent by weight. [Authority: COMAR 26.11.09.07A(1)(c)] Compliance with this requirement also provides compliance with the emissions standard for sulfur dioxide (SO<sub>2</sub>) established under 40 CFR §60.42c for the boilers when the boilers are burning distillate fuel oil. Specifically, 40 CFR §60.42c(d) establishes that compliance with the SO<sub>2</sub> standard for affected units may be demonstrated by use of fuel oil with a sulfur content that does not exceed 0.5 percent by weight.
- D2. Unless the Permittee obtains from the Department written authorization otherwise, the Permittee shall limit the 30-day rolling average sulfur content of any No. 6 fuel oil burned in the boilers to not more than 0.5 percent by weight. Compliance with this requirement also provides compliance with the emissions standard for sulfur dioxide established under 40 CFR §60.42c for the boilers. Specifically, 40 CFR §60.42c(d) and (g) establish that compliance with the standard for affected units shall be demonstrated by use of fuel oil with a sulfur content that does not exceed 0.5 percent by weight on a 30-day rolling average basis. Compliance with requirement D2 of this Section also provides compliance with COMAR 26.11.09.07A(1)(b), which prohibits burning or selling any residual fuel oil with a sulfur content in excess of 2.0 percent by weight.
- D3. The fuel oil sulfur limits imposed by this Part 70 permit apply at all times, including periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.42(i); and Permit to Construct Nos. 045-4-0244, 4-0245, and 4-0246 issued as one document 09/12/2008]

# Compliance Demonstration

- For any No. 2 fuel oil fired in the boilers, the performance test to determine compliance status with regard to the applicable SO<sub>2</sub> standard shall consist of the certification from the fuel supplier, as described in 40 CFR §60.48c(f)(1). [Authority: 40 CFR §60.44c(h)]
- For any No. 6 fuel oil fired in the boilers, the initial performance test to determine compliance status with regard to the applicable SO<sub>2</sub> standard shall Page 20 of 81

consist of sampling and analyzing the oil in the initial tank of oil to be fired in the NSPS boilers to demonstrate that the oil contains not more than 0.5 weight percent sulfur.

Thereafter, the Permittee shall sample the oil in the fuel tank after each new shipment of oil is received, as described under 40 CFR §60.46c(d)(2), which establishes that oil samples may be collected from the fuel tank for each boiler after the fuel tank is filled and before any oil is combusted. The Permittee shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the Permittee shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

[Authority: 40 CFR §60.44c(g) and §60.46c(d)(2)]

# Rationale for Periodic Monitoring Strategy

40 CFR 60, Subpart Dc requires fuel supplier certification for No. 2 fuel oil and oil sampling for No. 6 fuel oil to demonstrate compliance with the applicable sulfur content standard. Certifications and sampling of sulfur content are sufficient to demonstrate compliance with the applicable sulfur content limits.

### E. Control of Nitrogen Oxides

E1. To preclude applicability of federal non-attainment NSR requirements the Permittee shall limit the combined total emissions of nitrogen oxides (NO<sub>x</sub>) from emissions units BR-1, BR-3 and BR-4 to not more than 127.6 tons in all periods of 12 consecutive months unless the Permittee demonstrates to the satisfaction of the Department that a different NSR applicability threshold is appropriate. If and when such demonstration is approved by the Department the more appropriate NSR applicability threshold shall become the enforceable NO<sub>x</sub> emissions limit in this Part 70 permit. [Authority: Permits to Construct Nos. 045-4-0244, 4-0245, and 4-0246 issued as one document 09/12/2008]

### Compliance Demonstration

Within 30 days of the end of each calendar month the Permittee is required to determine for the month, and for the most recent period of 12 consecutive months, the combined total emissions of NO<sub>x</sub> from emissions units BR-1, BR-3 and BR-4.

If for any period of 12 consecutive months such combined total emissions of  $NO_x$  exceeds the NSR applicability threshold specified pursuant to condition E1 of Section 2.1 of Table IV-2 of the Part 70 permit, the Permittee is required to provide written notification of the emissions to the Department within 15 days of determination. The Permittee is required to conduct stack tests for  $NO_x$  on each of the emissions units and to base determinations of monthly and 12-monthly  $NO_x$  emissions on the most recent stack test results. The Permittee is also required to maintain records of all required determinations of  $NO_x$  emissions, including all methods of calculations, all data used and all assumptions made.

## Rationale for Periodic Monitoring Strategy

Monthly determinations of emissions of  $NO_x$  and periodic stack testing to confirm the bases for the determinations are sufficient monitoring strategies to demonstrate compliance with the applicable  $NO_x$  emissions limit.

- E2. For each of emissions units BR-1, BR-3, BR-4 and BR-5, each of which is a fuel burning unit with a rated heat input capacity less than 100 million Btu per hour, the Permittee is required to:
  - submit to the Department an identification of the emissions unit, the rated heat input capacity of the emissions unit, and the type of fuel burned in the emissions unit. This notification is necessary only if the required information differs from that included in the application for renewal of the Permittee's Part 70 permit. [Authority: COMAR 26.11.09.08E(1)]
  - perform a combustion analysis on the emissions unit at least once per year and optimize combustion based on the analysis.
     [Authority: COMAR 26.11.09.08E(2)]
  - once every 3 years, require each operator of the emissions units to attend training programs on combustion optimization that are sponsored by the Department, the EPA, or equipment vendors. [Authority: COMAR 26.11.09.08E(4)]

# Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is required to maintain for at least 5 years, and to make available to the Department upon request, records of all combustion analyses and of required training program attendance. COMAR 26.11.09.08 outlines the methods for demonstrating compliance with the requirements. No additional monitoring is required.

### F. Control of HAP

F1. The Permittee shall operate BR-1, BR-3, and BR-4 such that the concentration of carbon monoxide (CO) in the exhaust gases from each unit does not exceed 400 parts per million by volume (ppmv) when the volume is adjusted to 3 percent oxygen on a dry basis. [Authority: Permit to Construct Nos. 045-4-0244, 4-0245, and 4-0246 issued as one document 09/12/2008]

# Compliance Demonstration and Rationale for Periodic Monitoring Strategy

To demonstrate compliance with the applicable CO emissions standard, the Permittee shall conduct performance tests to determine CO emissions from the boilers. The performance tests will verify that CO emissions meet the applicable CO emissions standard for the boilers.

F2. No later than January 31, 2016 for BR-1, BR-3, and BR-4 and upon startup for BR-5, the Permittee shall comply with the work practice requirements of 40 CFR 63, Subpart DDDDD. [Authority: 40 CFR §63.7495(b)]

# Compliance Demonstration and Rationale for Periodic Monitoring Strategy

To comply with the requirements of 40 CFR 63, Subpart DDDDD for boilers greater than 10 MMBtu/hr that burn natural gas (and fuel oil only as a back up during gas curtailment or supply interruption), the Permittee must conduct a one-time energy assessment for the existing boilers, BR-1, BR-3, and BR-4, and initial and subsequent tune-ups of all boilers (existing and new). The Permittee must conduct the assessment and tune-ups using the procedures prescribed in Subpart DDDDD and submit initial and subsequent annual reports. The Permittee must also keep records of when gas supply is curtailed or interrupted and when alternative fuels are used. Subpart DDDDD outlines all of the specific initial and continuous compliance demonstration requirements for the assessment and tune-ups. No additional periodic monitoring is required.

# <u>Table IV – 3 (Other Fuel Burning Equipment)</u> – Emissions Units OR-1, OR-9, and HAT-1

- **OR-1**: 700-horsepower (29-MMBtu/hr) Cleaver Brooks® boiler fired with natural gas, with No. 2 and/or no. 6 fuel oil as back up, installed in 1985, located at the facility's Vegetable Oil Refinery, ARMA Registration No. 045-0042-5-0002.
- **OR-9**: Newpoint NUK® 5.85 MMBtu/hr, high-pressure steam generator (HPSG) fired with natural gas or propane, installed in 2011, located at the facility's Vegetable Oil Refinery, ARMA Registration No. 045-0042-5-0109.
- **HAT-1**: 1.99-MMBtu/hr Laars® hot water heater fired with natural gas, installed in 2006, located at the facility's Hatchery No. 3, ARMA Registration No. 045-0042-5-0084.

## **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- None of the emissions units are subject to nonattainment NSR requirements, PSD requirements, or to a synthetic minor limit.
- None of the emissions units are subject to 40 CFR 60, Subpart Dc (NSPS for Small Industrial-Commercial-Institutional Steam Generating Units). Each unit was installed before the June 9, 1989 applicability date of the subpart or is less than the 10 MMBtu/hr applicability threshold of the subpart.
- OR-1 and OR-9 are subject to 40 CFR 63, Subpart DDDDD (NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters operated at facilities that are major sources of HAP). The final NESHAP rule was promulgated on January 31, 2013. Existing boilers (boilers constructed June 4, 2010 or earlier) must comply with the NESHAP no later than January 31, 2016. HAT-1 is a hot water heater and is exempt from Subpart DDDDD.
- None of the emissions units are subject to Compliance Assurance Monitoring (CAM) requirements because none are equipped with an air pollution control device.

# **Applicable Standards and Limits:**

## A. General Requirements

- A1. Emissions unit OR-1 shall burn only natural gas except during periods of gas curtailment or gas supply interruptions of any duration as defined in 40 CFR §63.7575. No. 2 and/or No. 6 fuel oil may be burned only during periods of gas curtailment or gas supply interruptions or for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year. [Authority: 40 CFR §63.7575]
- A2. Emissions units OR-9 and HAT-1 shall burn only natural gas or propane unless the Permittee obtains an approval from the Department to burn alternate fuels. [Authority: COMAR 26.11.02.09A]

# Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

To demonstrate compliance with the fuel use limits, the Permittee shall:

- maintain a copy of the interruptible natural gas service contract for emissions unit OR-1 that the Permittee is required by the Part 70 operating permit to maintain with a utility company under the jurisdiction of the Maryland Public Service Commission;
- maintain records of all periods during which the Permittee's natural gas service was interrupted or curtailed; and
- maintain records of all fuels burned in emissions unit OR-1 during periods when natural gas was available, and records of all fuels burned in emissions unit OR-1 when natural gas service was interrupted or curtailed.

The applicable requirement limits the types of fuels that may be burned and when the fuels may be burned in the emissions units. OR-9 and HAT-1 are equipped to burn natural gas or propane only. Records of utility contracts, periods of when natural gas was interrupted or curtailed, and fuel usage are sufficient to demonstrate compliance. The records must also be made available to the Department upon request for compliance review.

## B. <u>Visible Emissions Limitations</u>

The Permittee shall limit the opacity of exhaust gases to not more than 20 percent. Exceptions: The opacity standard stated in this condition does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period. [Authority: COMAR 26.11.09.05A(1) and COMAR 26.11.09.05A(3)]

## Compliance Demonstration

- The Permittee shall maintain and operate each emissions unit so as to comply with all applicable requirements concerning visible emissions.
- The Permittee shall conduct 1-minute visible emissions observations when burning No. 6 oil for emissions unit OR-1 in accordance with Table IV-1, 1.1 of the permit.

## Rationale for Periodic Monitoring Strategy

Properly operated and maintained boilers will rarely cause visible emissions when burning natural gas or No. 2 fuel oil. Only emissions unit OR-1 burns fuel oil and only when natural gas is not available. For emissions unit OR-1, visible emissions observations are required only when burning No. 6 oil. Visible emissions observations at least once every 168 hours when the unit burns No. 6 oil are sufficient to demonstrate compliance with applicable opacity standards.

### C. Control of Particulate

For emissions unit OR-1, the Permittee shall not cause or permit particulate matter caused by the combustion of residual oil to be discharged into the atmosphere in excess of the amounts shown in Figure 2 of COMAR 26.11.09.09. [Authority: COMAR 26.11.09.06A(2)]

# Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is not required to conduct periodic monitoring to demonstrate compliance with the particulate emissions standard because compliance can be demonstrated by use of standard emissions factors. Assuming that any No. 6 fuel oil burned in the unit has the maximum allowable sulfur content of 2.0 percent by

weight, then the AP-42 emissions factor for particulate is approximately 21.6 pounds of particulate per 1,000 gallons of No. 6 fuel oil burned. Assuming a heating value of 147,000 Btu/gal for No. 6 fuel oil, the AP-42 emissions factor converts to 0.15 pounds particulate per million Btu heat input. For emissions unit OR-1 the regulatory standard is 0.38 pounds per million Btu heat input, which is considerably more than the amount predicted by the AP-42 factor.

## D. Control of Sulfur Oxides

For emissions unit OR-1, the Permittee shall not burn, sell, or make available for sale any distillate fuel oil with a sulfur content in excess of 0.3 percent by weight and any residual fuel oil with a sulfur content in excess of 2.0 percent by weight. [Authority: COMAR 26.11.09.07A(1)(b) and (c)]

### Compliance Demonstration

For emissions unit OR-1, the only unit that can burn fuel oil, the Permittee is required to periodically obtain from fuel suppliers certificates of analysis that provide the sulfur content of any fuel oil to be burned in the unit.

## Rationale for Periodic Monitoring Strategy

Fuel supplier certifications showing the sulfur content of fuel oils to be burned is sufficient to demonstrate compliance with the applicable sulfur content limits.

## E. Control of Nitrogen Oxides

For each of emissions units OR-1, OR-9, and HAT-1, each of which is a fuel burning unit with a rated heat input capacity less than 100 million Btu per hour, the Permittee is required to:

- submit to the Department an identification of the emissions unit, the rated heat input capacity of the emissions unit, and the type of fuel burned in the emissions unit. This notification is necessary only if the required information differs from that included in the application for renewal of the Permittee's Part 70 permit. [Authority: COMAR 26.11.09.08E(1)]
- perform a combustion analysis on the emissions unit at least once per year and optimize combustion based on the analysis. [Authority: COMAR 26.11.09.08E(2)]
- once every 3 years, require each operator of the emissions units to attend training programs on combustion optimization that are sponsored by the Page 27 of 81

Department, the EPA, or equipment vendors. [Authority: COMAR 26.11.09.08E(4)]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is required to maintain for at least 5 years, and to make available to the Department upon request, records of all combustion analyses and of required training program attendance. COMAR 26.11.09.08 outlines the methods for demonstrating compliance with the requirements. No additional monitoring is required.

# F. Control of HAP

No later than January 31, 2016, the Permittee shall comply with the work practice requirements of 40 CFR 63, Subpart DDDDD for emissions units OR-1 and OR-9. [Authority: 40 CFR §63.7495(b)]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

To comply with the requirements of 40 CFR 63, Subpart DDDDD for boilers between 5 and 10 MMBtu/hr and greater than 10 MMBtu/hr that burn natural gas (and fuel oil only as a back up during gas curtailment or supply interruption), the Permittee must conduct a one-time energy assessment and initial and subsequent tune-ups of all boilers.

Annual tune-ups are required for emissions unit OR-1 and biennial tune-ups are required for OR-9. Hot water heaters (such as emissions unit HAT-1) are exempt from Subpart DDDDD.

The Permittee must conduct the assessment and tune-ups using the procedures prescribed in Subpart DDDDD and submit initial and subsequent reports. The Permittee must also keep records of when gas supply is curtailed or interrupted and when alternative fuels are used. Subpart DDDDD outlines all of the specific initial and continuous compliance demonstration requirements for the assessment and tune-ups. No additional periodic monitoring is required.

# <u>Table IV – 4 (Vegetable Oil Refinery)</u> – Emission Units OR-5, OR-6, and OR-8, ARMA Registration No. 045-0042-8-0052

**OR-5:** Clay Transfer Silo with Bag Filter, installed 03/1985

**OR-6:** Clay Storage Silo with Bag Filter, installed 09/1985

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OR-8: DeSmet® Crude Vegetable Oil Deodorizing Unit, installed in 2011

Additional non-fuel burning emissions units associated with the vegetable oil refinery are included in Section V (Insignificant Activities) of the Part 70 permit.

## **Permitting History:**

- Neither of emissions units OR-5 and OR-6 has undergone reconstruction or modification since initial construction. OR-8 was constructed in 2011 to replace an existing unit.
- None of the emissions units are subject to nonattainment NSR requirements,
   PSD requirements, or to a synthetic minor limit.
- None of the emissions units are subject to any NSPS promulgated under 40 CFR 60.
- None of the emissions units are subject to any NESHAP promulgated under 40 CFR 61 or 63.
- Neither of emissions units OR-5 and OR-6 is subject to Compliance
   Assurance Monitoring (CAM) requirements because the pre-control potential to-emit from each unit is less than 100 tons of particulate.

### **Applicable Standards and Limits:**

### A. Visible Emissions Limitations

For emission units OR-5 and OR-6, the Permittee shall not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity. Exceptions. The visible emissions standard stated in this condition does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. [Authority: COMAR 26.11.06.02C(1) and COMAR 26.11.06.02A(2)]

# Compliance Demonstration

For each of emissions units OR-5 and OR-6, at least once per month the Permittee is required to conduct observations for visible emissions from the exhaust vent of the bag filter on the emissions unit. Such observations are to be conducted in accordance with requirements in Section 1.1 of Table IV-1 of the Part 70 permit. Unless the Permittee provides to the Department a valid demonstration that an observer could reasonably expect visible emissions greater than zero percent opacity to be observed from a properly maintained and operated bag filter associated with either emissions unit OR-5 or OR-6, if visible emissions observed from a bag filter exceed zero percent opacity, the Permittee is required to either initiate immediate shutdown of all installations contributing to the visible emissions or shall:

- inspect all process and/or control equipment with potential to contribute to the visible emissions;
- (2) where practical, perform within 48 hours all repairs and/or adjustments to all process equipment and control equipment necessary to eliminate the visible emissions; and
- (3) make written records of any repairs and/or adjustments to process equipment and control equipment that were necessary to eliminate the visible emissions; and
- (4) if within 48 hours visible emissions have not been eliminated, either:
  - (a) conduct at least once per day EPA Reference Method 9 visible emissions observations for a period of at least 18 minutes per observation until visible emissions have been eliminated; or
  - (b) shut down all equipment contributing to the visible emissions, and effect all maintenance and repairs necessary to re-establish operation without visible emissions before re-starting.

[Authority: COMAR 26.11.03.06C]

## Rationale for Periodic Monitoring Strategy

The compliance demonstration for particulate emissions from the silos requires that the Permittee develop and implement an operations and maintenance plan for the bag filters that control emissions from the silos (see paragraph B below). Implementation of such a plan will be sufficient to preclude visible emissions from the units. Monthly observations

for visible emissions from the silos when they are being loaded will be sufficiently frequent to determine whether the filters are being properly maintained.

## B. Control of Particulate

For each of emissions units OR-5 and OR-6, the Permittee shall not cause or permit particulate matter to be discharged in excess of 0.05 gr/SCFD (115 mg/dscm). [Authority: COMAR 26.11.06.03B(1)(a)]

### Compliance Demonstration

For the bag filters that control emissions from emissions units OR-5 and OR-6, the Permittee is required to establish in writing, revise as necessary and implement an operations and maintenance (O&M) plan developed and implemented in accordance with Section 1.2 of Table IV-1 of the Part 70 permit. [Authority: COMAR 26.11.03.06C]

## Rationale for Periodic Monitoring Strategy

The bag filters are designed to limit the concentration of particulate matter in exhaust gases to not more than 0.01 gr/scfd when the filters are properly maintained. Compliance with requirements established in Table IV-1 for O&M plans will ensure that the filters are properly maintained, and that records of preventive maintenance activities and actual maintenance performed will be available for the Department to review.

## C. Control of Volatile Organic Compounds

For emissions unit OR-8, the Permittee shall establish in writing and implement "good operating practices" designed to minimize emissions of VOC. [Authority: COMAR 26.11.19.02G and COMAR 26.11.19.02I]

# Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is a facility-wide major source of VOC subject to VOC RACT requirements in COMAR 26.11.19.02G. For small sources of VOC such as emissions unit OR-8, VOC RACT is the "good operating practices" requirements of COMAR 26.11.19.02I. Under COMAR 26.11.19.02I, the Permittee must establish and implement "good operating practices" to minimize emissions of VOC, keep records of the practices, and make the practices available to the Department upon request. COMAR 26.11.19.02I outlines the specific requirements for "good operating practices" and no additional periodic monitoring is required.

<u>Table IV-5 (Soybean Processing – Except Oil Extraction)</u> – Emissions Units SP-1, SP-2, SP-3, SP-4, SP-5, SP-6, SP-7, SP-8, SP-13, SP-18, and SP-19, ARMA Registration No. 045-0042-8-0084

- **SP-1:** Two (2) Cantrell® Double Series Shakers, 11 tons-per-hour each, (Cracking and Dehulling, Primary Tables 5 & 6), Controlled by a MAC Environmental® Baghouse, installed 01/1987
- SP-2: Two (2) Cantrell® Double Series Shakers, 11 tons-per-hour each, (Cracking and Dehulling, Primary Tables 3 & 4), Controlled by a MAC Environmental® Baghouse, installed 01/1987
- SP-3: Two (2) Cantrell® Double Series Shakers, 11 tons-per-hour each, (Cracking and Dehulling, Primary Tables 1 & 2), Controlled by a MAC Environmental® Baghouse, installed 01/1987
- **SP-4:** Two (2) Champion/Roskamp® Meal Grinders (20" x 44" Magnum Model Hammermills), and two (2) Sifters (60" x 30" Gyrosifters), 31.5 tons-perhour input each, Controlled by a MAC Environmental® Baghouse, installed 01/1987
- SP-5: Rotex® Model 536 Whole Bean Cleaner (Scalper), 89 tons-per-hour, and Storage Tanks. Controlled by a MAC Environmental® Baghouse, installed 01/1987, subject to 40 CFR 60, Subpart DD
- **SP-6:** Six (6) Roskamp® Flaking Rolls, 14.5 tons-per-hour each, Controlled by a MAC Environmental® High Efficiency Cyclone Collector, installed 01/1995
- **SP-7:** Two (2) Fluidized Bed Separators for aspiration of Secondary Tables, 15 tons-per-hour each, Controlled by a MAC Environmental® Baghouse, installed 01/1987
- SP-8: Two (2) Champion/Roskamp® 20" x 44" Magnum Model Hammermill Hull Grinders Controlled by a MAC Environmental® Baghouse, installed 01/1987
- **SP-13:** French Industries® Soybean Meal Dryer/Cooler, 67 tons-per-hour, Controlled by three (3) Kice® CK-90 Cyclones, installed 06/1995; The three (3) Kice® cyclones are subject to CAM requirements
- **SP-18:** Meal/Hull Loadout Area Controlled by a Pneumafil® Baghouse, installed 05/1999; The Pneumafil® Baghouse is subject to CAM requirements Page 32 of 81

**SP-19:** Four (4) Roskamp® P-12 10 x 52 (two pair high) Cracking Mills Controlled by a MAC Environmental® 96 MWP 212-160 Baghouse, installed 01/1987

**SP-20:** Raw Dry Soybean Conveyances Controlled by one (1) Kice® Baghouse., subject to 40 CFR 60, Subpart DD

# **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- None of the emissions units are subject to nonattainment NSR requirements,
   PSD requirements, or to a synthetic minor limit.
- Excepting emissions units SP-5 and SP-20, none of the emissions units are subject to any NSPS promulgated under 40 CFR 60. Emissions units SP-5 and SP-20 are grain handling operation that began operation after August 3, 1978, and as such are subject to 40 CFR 60, Subpart DD (NSPS for Grain Elevators). The remaining emissions units do not qualify as grain handling operations according to EPA guidance.
- None of the emissions units are subject to any NESHAP promulgated under 40 CFR 61 or 63.
- The control devices associated with emissions units SP-13 and SP-18 are subject to Compliance Assurance Monitoring (CAM) requirements because the pre-control potential-to-emit (pc-pte) for each emissions unit exceeds 100 tons of particulate per year. The pc-pte for each of the remaining emissions units is less than 100 tons per year.

# A. Visible Emissions Limitations

A1. For each emissions unit identified in Section 5.0 of this table, the Permittee shall not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity. Exceptions. The visible emissions standard stated in this condition does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if:

(a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60

minute period. [Authority: COMAR 26.11.06.02C(1) and COMAR 26.11.06.02A(2)]

- A2. For the Rotex® Model 536 Whole Bean Cleaner associated with emissions unit SP-5 and the Raw Dry Soybean Conveyances associated with emissions unit SP-20, the Permittee shall not cause to be discharged into the atmosphere any non-fugitive process emission which exhibits greater than 0 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(b)(2) and 40 CFR §60.11(c)]
- A3. For the Rotex® Model 536 Whole Bean Cleaner associated with emissions unit SP-5 and the Raw Dry Soybean Conveyances associated with emissions unit SP-20, the Permittee shall not cause to be discharged into the atmosphere any fugitive emission which exhibits greater than 0 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(c)(2) and 40 CFR §60.11(c)]

### Compliance Demonstration

For each baghouse and cyclone associated with emissions units SP-1, SP-2, SP-3, SP-4, SP-5, SP-6, SP-7, SP-8, SP-19, and SP-20, at least once per month the Permittee is required to conduct observations for visible emissions from the exhaust vent of the baghouse or cyclone that controls particulate emissions from the emissions unit. Such observations are to be conducted in accordance with requirements in Section 1.1 of Table IV-1 of the Part 70 permit.

If visible emissions greater than zero percent opacity are observed during an observation, the Permittee is required to either initiate immediate shutdown of all installations contributing to the visible emissions or:

- (1) inspect all process equipment and control equipment with potential to contribute to the visible emissions;
- (2) where practical, perform within 24 hours all repairs and/or adjustments to all process equipment and control equipment as necessary to eliminate visible emissions:
- (3) make written records of any repairs and/or adjustments to process equipment and control equipment that were necessary to eliminate visible emissions; and

- (4) if visible emissions have not been eliminated within 24 hours, either:
  - (a) conduct at least once per day EPA Reference Method 9 visible emissions evaluations for a period of at least 12 minutes per evaluation until visible emissions have been eliminated; or
  - (b) shut down all equipment contributing to the visible emissions, and effect all maintenance and repairs necessary to re-establish operation without visible emissions before re-starting.

## Rationale for Periodic Monitoring Strategy

Although the applicable standard for the soybean processing emissions units (excepting SP-5 and SP-20, which are subject to NSPS) allows visible emissions of up to 20 percent opacity, the requirements in the Part 70 permit require that the Permittee take corrective action if any visible emissions are observed, regardless of opacity. The Permittee has established that when the affected control devices are properly maintained and properly operated there will be no visible emissions in any exhaust gases during normal process operation.

Since proper maintenance and operation of the process equipment and control devices is required under the requirements for particulate control in the Part 70 permit, it is necessary that the Permittee take action when visible emissions of any opacity are observed. Also, the requirement that the Permittee take action when any visible emissions are observed allows the Permittee to observe for visible emissions without employing EPA Reference Method 9 to make an opacity determination.

### B. Control of Particulate

- B1. For each emissions unit identified in Section 5.0 of this table, the Permittee shall not cause or permit particulate matter to be discharged from any installation in excess of 0.05 gr/dscf (115 mg/dscm). [Authority: COMAR 26.11.06.03B(1)(a)]
- B2. For the Rotex® Model 536 Whole Bean Cleaner associated with emissions unit SP-5 and the Raw Dry Soybean Conveyances associated with emissions unit SP-20, the Permittee shall not cause to be discharged into the atmosphere any non-fugitive process emission which contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf). [Authority: 40 CFR §60.302(b)(1)]

## Compliance Demonstration

For each emissions unit identified in Section 5.0 of Table IV-5 of the Part 70 permit, the Permittee is required to establish in writing, revise as necessary and implement an operations and maintenance (O&M) plan developed and implemented in accordance with Section 1.2 of Table IV-1 of the Part 70 permit.

## Rationale for Periodic Monitoring Strategy

When properly maintained and operated the baghouses and cyclones associated with the emissions units in the soybean processing plant are designed to provide compliance with all applicable particulate emissions standards and limits during normal process operations. Development and implementation of the required O&M plan will ensure that the control devices are properly maintained and operated.

B3. <u>Compliance Assurance Monitoring (CAM) requirements</u>, which apply to the cyclones that control particulate emissions from emissions unit SP-13 and the baghouse that controls particulate emissions from emissions unit SP-18:

The Permittee is required to comply with all applicable CAM requirements provided in Tables IV-12, IV-12A and IV-12B of the Part 70 permit.

## <u>Table IV – 6 (Soybean Oil Extraction)</u> – Emissions Unit SP-16

**SP-16:** Soybean oil extraction plant controlled by condensers and a French Industries® mineral oil scrubber, installed 01/1987, subject to 40 CFR 63, Subpart GGGG

## **Permitting History:**

- Emissions unit SP-16 has not undergone any reconstruction since initial construction; however the Permittee modified the hexane recovery system in 2010 and replaced the desolventizing toaster in 2013.
- Emissions unit SP-16 is not subject to nonattainment NSR requirements, PSD requirements, or to a synthetic minor limit.
- Emissions unit SP-16 is not subject to any NSPS promulgated under 40 CFR 60.

- Emissions unit SP-16 is subject to 40 CFR 63, Subpart GGGG
  (Solvent Extraction for Vegetable Oil Production). The modification
  to the hexane recovery system in 2010 and the replacement
  desolventizing toaster in 2013 are considered significant
  modifications under Subpart GGGG but do not constitute
  reconstruction. Emissions unit SP-16 remains an existing source
  with respect to Subpart GGGG requirements.
- Emissions unit SP-16 is <u>not</u> subject to Compliance Assurance Monitoring (CAM) requirements because the plant's HAP emissions are subject to major HAP source rule 40 CFR 63, Subpart GGGG (Solvent Extraction for Vegetable Oil Production).

## **Applicable Standards and Limits:**

## A. Control of VOC

- A1. The Permittee shall install and operate a Drager® automatic VOC leak monitoring system in accordance with manufacturer specifications and with appropriate set points to provide warning of leaks of VOC from the soybean oil extraction processes.
- A2. The Permittee shall operate, in accordance with the manufacturer's recommendations, a mineral oil absorption system on the final VOC exhaust vent using groundwater as the cooling source that does not exceed 60 °F.
- A3. The Permittee shall install screened sections in the desolventizing toaster to better provide product/steam contact to improve hexane recovery.
- A4. The Permittee shall install a 10-inch diameter vapor line from the extractor to the distillation system to improve vacuum control in the extraction system.
- A5. To minimize loss of hexane in the soybean oil extraction process, the Permittee shall prepare a standard operating procedures (SOP) document for the efficient operation of the soybean oil extraction process and a training manual which clearly and concisely identifies the operation of the process that is used for training new and existing operators. The manual shall include good operating practices that will minimize VOC emissions and maximize hexane recovery.
- A6. The Permittee shall limit emissions of VOC from the soybean oil extraction processes to a calendar-year average of not more than 0.3 gallons VOC per ton of soybeans processed.

[Authority: COMAR 26.11.19.02G(2), which requires that reasonably available control technology (RACT) for volatile organic compounds (VOC) be identified for all sources of VOC located at any facility that is a major source of VOC. VOC RACT for the Permittee's soybean oil extraction system has been established in a Consent Order executed in January 2005.] Compliance with the provisions of the Consent Order concerning documentation and implementation of good operating practices designed to minimize emissions of VOC also provides compliance with COMAR 26.11.19.02I.

## Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

- The Permittee is required to maintain credible records sufficient to demonstrate that the soybean oil extraction plant (SOEP) incorporates all of the equipment and design features required by the Consent Order that establishes VOC RACT for the SOEP. Such equipment and design features include a Drager® automatic VOC leak monitoring system with appropriate set points to provide warning of leaks of VOC from the SOEP; a mineral oil absorption system on the final VOC exhaust vent using groundwater as the cooling source that does not exceed 60 °F; screened sections in the desolventizing toaster that better provide product/steam contact to improve hexane recovery; and a 10-inch diameter vapor line from the extractor to the distillation system that improves vacuum control in the extraction system.
- The Permittee is required to maintain for the service life of the SOEP, and make available to the Department upon request, a standard operating procedures document with content as described in the Consent Order that establishes VOC RACT for the SOEP.
- The Permittee is required to report, in accordance with conditions number 4
   ("Report of Excess Emissions and Deviations"), and number 9 (Compliance
   Certification report), of <u>Section III Plant Wide Conditions</u> of the Part 70 permit,
   deviations from requirements of the Consent Order that establishes VOC RACT
   for the soybean oil extraction plant (SOEP).

Emissions unit SP-16 is designed to meet the requirements of the VOC RACT and Consent Order. Records of the required design features and standard operating procedures are sufficient to demonstrate compliance with this requirement.

A7. By no later than January 31 of each year the Permittee shall determine for the previous calendar year the ratio of gallons of VOC emissions from the soybean oil extraction plant (SOEP) to the tons of soybeans processed in the SOEP. [Authority: COMAR 26.11.01.05]

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## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

- The Permittee is required to monitor VOC usage and tons of soybeans processed in the soybean oil extraction plant (SOEP) as necessary to make all required determinations of the calendar year ratio of VOC emissions from the SOEP to the tons of soybeans processed in the SOEP.
- The Permittee is required to maintain for at least 5 years, and to make available to the Department upon request, records of all required determinations of the calendar year ratio of VOC emissions from the SOEP to the tons of soybeans processed in the SOEP. Such records are to include all data, assumptions and methods used in making the required determinations.
- A8. The Permittee shall visually inspect all equipment and components in VOC service for leaks at least once per calendar month. If leaks are detected, the Permittee shall:
  - (1) Tag any leak immediately so that the tag is clearly visible. The tag shall be made of a material that will withstand any weather or corrosive conditions to which it may be normally exposed. The tag shall bear an identification number, the date that the leak was discovered, and the identity of the person who discovered the leak. The tag shall remain in place until the leak has been repaired.
  - (2) Initiate immediate action to repair all observed VOC leaks that can be repaired within 48 hours.
  - (3) Repair all other leaking components within fifteen (15) days of discovery. If a replacement part is needed, the part shall be ordered within three (3) days of discovery of the leak, and the leak shall be repaired within 48 hours of receipt of the part.
  - (4) Maintain a supply of components and component parts, such as seals, gaskets, packing and pipe fittings, that are known to wear or corrode, or that otherwise need to be routinely replaced.

[Authority: COMAR 26.11.19.16]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is required to maintain records of all required calendar-monthly visual inspections of equipment and components in VOC service for leaks of VOC. Such records are to include identification of the inspector, date of the inspection, number and location of leaks detected, an account of any corrective actions taken, and the amount of time taken to eliminate each leak detected. The Permittee is also required to report, in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions of this Part 70 permit, deviations from leak detection and repair requirements established in COMAR 26.11.19.16. COMAR 26.11.19.16 outlines the specific inspection procedures to demonstrate compliance. No additional monitoring is necessary.

## B. Control of HAP

- B1. For all periods of 12 consecutive operating months the Permittee shall operate the soybean oil extraction plant (SOEP) such that the Compliance Ratio of "Actual HAP Loss" to "Allowable HAP Loss" is not more than 1.00. [Authority: 40 CFR §63.2840]
- B2. For each operating month the Permittee shall calculate the Compliance Ratio referenced in condition B(1) of this Section, and the Permittee shall determine such Compliance Ratio in accordance with all applicable requirements established in 40 CFR §63.2840, §63.2850, §63.2851, §63.2853, §63.2854 and §63.2855.
- B3. The Permittee shall comply with paragraphs (1) through (5) of this condition. The Permittee shall:
  - (1) Submit the necessary notifications in accordance with 40 CFR §63.2860 (see conditions B1 and B2 of Section 6.4 of this table);
  - (2) Develop and implement a plan for demonstrating compliance in accordance with 40 CFR §63.2851 (see condition B1 of Section 6.3 of this table);
  - (3) Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in 40 CFR §63.2852 (see condition B(6) of this Section);

- (4) Maintain, in accordance with 40 CFR §63.2862, all the necessary records used to demonstrate compliance with 40 CFR 63, Subpart GGGG (see Section 5.4 of this table); and
- (5) Submit the following reports: (i) annual compliance certifications in accordance with applicable requirements included in the Permittee's Part 70 (Title V) Operating Permit; (ii) periodic SSM reports in accordance with applicable requirements included in the Permittee's Part 70 (Title V) Operating Permit; and (iii) immediate SSM reports in accordance with 40 CFR §63.2861(d).

[Authority: 40 CFR §63.2850(a), (d)(1) & (d)(2); and §63.10(a)(5)]

**Important Note**: Although Table 1 of 40 CFR §63.2850 excludes requirements for making certain records and determinations for periods of initial startup and SSM, such records and determinations may be necessary for determining compliance with the VOC emissions limit for the SOEP. The Consent Order that establishes the allowable VOC emissions limit does not include any provisions for excluding emissions during periods of initial startup or SSM.

- B4. If the Permittee's soybean oil extraction plant experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then within 15 days of the beginning date of the malfunction the Permittee shall select, and meet the requirements associated with, one of the following two compliance options: (i) Normal operation requirements, for sources that have been significantly modified, as specified in paragraph C(10)(a) of this permit; or
  - (ii) Throughout the malfunction period, the Permittee shall meet all of the requirements in Table 1 to 40 CFR 63, Subpart GGGG for sources operating during a malfunction period. At the end of the malfunction period, the SOEP shall then meet all of the requirements listed in Table 1 of 40 CFR 63, Subpart GGGG for sources under normal operation. [Authority: 40 CFR §63.2850(e)]
- B5. The Permittee shall develop a written startup, shutdown and malfunction (SSM) plan in accordance with requirements established under 40 CFR §63.2852. Such plan shall describe, in detail, procedures for operating and maintaining the source during periods of SSM; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The SSM plan does not need to address any scenario that would not cause the source to exceed

an applicable emission limitation in the relevant standard. [Authority: 40 CFR §63.2852 and §63.6(e)3]

B6. The Permittee shall comply with all applicable requirements established in 40 CFR 63, Subpart A (General Provisions). Table 1 of 40 CFR §63.2870 specifies which parts of the General Provisions apply to the soybean oil extraction plant. [Authority: 40 CFR §63.2870]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

- The Permittee is required to develop, establish in writing and implement a plan that provides detailed procedures the Permittee will follow to monitor and record data necessary for demonstrating compliance with requirements for controlling emissions of HAP. Such plan must include at minimum the items that follow in paragraphs (1) through (8):
  - (1) The name and address of the owner or operator.
  - (2) The physical address of the soybean oil extraction plant.
  - (3) A detailed description of all methods of measurement the Permittee will use to determine solvent losses, HAP content of solvent, and the tons of soybeans processed.
  - (4) When each measurement will be made.
  - (5) Examples of each calculation the Permittee will use to determine compliance status. The Permittee shall Include examples of how the Permittee will convert data measured with one parameter to other terms for use in compliance determination.
  - (6) Example logs of how data will be recorded.
  - (7) A plan to ensure that the data continue to meet compliance demonstration needs.
  - (8) Descriptions of procedures the Permittee will follow in obtaining and recording data, and determining compliance under normal operations or a startup, shutdown or malfunction (SSM) subject to the 40 CFR §63.2850(d)(2) initial startup period or the §63.2850(e)(2) malfunction period.

• By the end of each calendar month that follows an operating month (as defined in 40 CFR §63.2872) the Permittee is required to determine for the operating month, and for the previous 12 consecutive operating months: actual solvent loss from the soybean oil extraction processes; weighted average volume fraction of HAP in the actual solvent loss, and the quantity of soybeans processed. Such determinations must be made in accordance with requirements established in 40 CFR §63.2853, §63.2854 and §63.2855.

The Part 70 renewal includes all record keeping and reporting requirements that are included in 40 CFR 63, Subpart GGGG to ensure compliance with HAP limits and monitoring requirements established in the Subpart. Such record keeping and reporting requirements include those established in §63.2861(a), (b), (c) & (d) and §63.2862(b), (c), (d) & (e).

<u>Table IV – 7 (Feed Mill Operations)</u> – Emissions Units FM-1, FM-2, FM-3, FM-4, FM-6, FM-8, FM-9, FM-10, FM-11, FM-12, FM-13, FM-14, FM-15, and FM-16, ARMA Registration Nos. -045-0042-8-0086 and 8-0096

- **FM-1:** Bulk Ingredient Rail Dump Pit 70 tons-per-hour, Uncontrolled (Unconfined Source), installed 01/1972
- **FM-2:** Bulk Ingredient Truck Dump Pit 70 ton per hour, Uncontrolled (Unconfined Source), installed 01/1972, small liquid loading only
- **FM-3:** Champion HM44-48 Hammermill, 60 tons-per-hour, Controlled by an Alanca Environmental® 264LS Baghouse, installed 05/2007
- **FM-4:** Champion HM44-48 Hammermill, 60 tons-per-hour, Controlled by an Alanca Environmental® 264LS Baghouse (the same baghouse that controls emissions unit FM-3), installed 05/2007
- FM-6: Three (3) Finished Feed Storage Silos No controls, installed 01/1964
- **FM-8:** DL Methionine Storage Tank Controlled by an Alanca Environmental® Baghouse, installed 01/1964; The Alanca Environmental® Baghouse is subject to CAM requirements.
- **FM-9:** Pellet Mill Line No. 1 with three (3) Aircon® cyclones, 70 tons-per-hour input, installed 12/2005
- **FM-10:** Pellet Mill Line No. 2 with three (3) Aircon® cyclones, 30 tons-per-hour input, installed 01/1964

- **FM-11:** Pellet Line No. 3, with two (2) MAC Environmental® High Efficiency Cyclones, 20 tons-per-hour input, installed 01/1964
- **FM-12:** Finished Feed Loadout, 70 tons-per-hour input, animal fat used as dust suppressant (Unconfined Source), installed 01/1964
- **FM-13:** Ingredient Mixer and Material Handling Equipment Controlled by MAC Environmental® Baghouse, installed 01/1964; The MAC Environmental® Baghouse is subject to CAM requirements.
- **FM-14:** Ingredient Storage Bins/Silo Controlled by Bin Vent Filters, installed 01/1964
- FM-15: Salt Storage Silo Controlled by Bin Vent Filters, installed 01/1964
- FM-16: Meal Storage Silo Controlled by Bin Vent Filters, installed 01/1964

## **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- None of the emissions units are subject to nonattainment NSR requirements,
   PSD requirements, or to a synthetic minor limit.
- None of the emissions units are subject to any NSPS promulgated under 40 CFR 60.
- None of the emissions units are subject to any NESHAP promulgated under 40 CFR 61 or 63.
- Each of the control devices associated with emissions units FM-8 and FM-13 is subject to Compliance Assurance Monitoring (CAM) requirements because the pre-control potential-to-emit (pc-pte) for each emissions unit exceeds 100 tons of particulate per year, which is the major source threshold for particulate emissions in Wicomico County. The remaining emissions units are not subject to CAM requirements because either they are not equipped with a control device or they have a pc-pte for particulate that is less than 100 tons per year.

## **Applicable Standards and Limits:**

## A. Visible Emissions Limitations

For each of emissions units FM-3, FM-4, FM-6, FM-9, FM-9, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16: The Permittee shall not cause or permit the discharge of emissions from any installation or building, other than water in an uncombined form, which is greater than 20 percent opacity. Exceptions. The visible emissions standard stated in this condition does not apply to emissions during start-up and process modifications or adjustments, or occasional cleaning of control equipment, if: (a) The visible emissions are not greater than 40 percent opacity; and (b) The visible emissions do not occur for more than 6 consecutive minutes in any 60 minute period. [Authority: COMAR 26.11.06.02C(1) and COMAR 26.11.06.02A(2)]

Compliance Demonstration for Emissions Units FM-3, FM-4, FM-8, FM-9, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16

For each of emissions units FM-3, FM-4, FM-8, FM-9, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16: The Permittee is required to conduct observations for visible emissions at least once per month, and such observations are to be conducted in accordance with requirements in Section 1.1 of Table IV-1 of the Part 70 permit.

Unless the Permittee provides to the Department a valid demonstration that an observer could reasonably expect visible emissions greater than zero percent opacity to be observed from a properly maintained and operated baghouse or cyclone associated with the emissions unit, if visible emissions greater than zero percent opacity are observed during an observation, the Permittee must either initiate immediate shutdown of all installations contributing to the visible emissions or:

- (1) inspect all process equipment and control equipment with potential to contribute to the visible emissions;
- (2) where practical, perform within 24 hours all repairs and/or adjustments to all process equipment and control equipment as necessary to eliminate visible emissions;
- (3) make written records of any repairs and/or adjustments to process equipment and control equipment that were necessary to eliminate visible emissions; and
- (4) if visible emissions have not been eliminated within 24 hours, either:

- (a) conduct at least once per day EPA Reference Method 9 visible emissions evaluations for a period of at least 12 minutes per evaluation until visible emissions have been eliminated; or
- (b) shut down all equipment contributing to the visible emissions, and effect all maintenance and repairs necessary to reestablish operation without visible emissions before re-starting.

## Rationale for Periodic Monitoring Strategy for Emissions Units FM-3, FM-4, FM-8, FM-9, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16

Although the applicable standard for the Feed Mill emissions units allows visible emissions of up to 20 percent opacity, the requirements in the Part 70 permit require that the Permittee take corrective action if any visible emissions are observed, regardless of the opacity. The Permittee has established that when the affected control devices are properly maintained and properly operated there will be no visible emissions in any exhaust gases during normal process operation. Since proper maintenance and operation of the process equipment and control devices is required under the requirements for particulate control in the Part 70 permit, it is necessary that the Permittee take action when visible emissions of any opacity are observed. Also, the requirement that the Permittee take action when any visible emissions are observed allows the Permittee to observe for visible emissions without employing EPA Reference Method 9 to make an opacity determination.

## Compliance Demonstration for Emissions Unit FM-6

For each of the 3 storage silos associated with emissions unit FM-6 the Permittee shall conduct observations for visible emissions at least once per month and such observations shall be conducted in accordance with requirements in Section 1.1 of Table IV-1 of this Part 70 permit. If visible emissions are detected during an observation the Permittee shall conduct an EPA Reference Method 9 visible emissions evaluation to determine if the visible emissions exceed 20 percent opacity. [Authority: COMAR 26.11.03.06C]

## Rationale for Periodic Monitoring Strategy for Emissions Unit FM-6:

There is no process equipment or control equipment associated with the 3 finished feed storage silos, so there is no equipment to inspect or repair or maintain if visible emissions are observed when a silo is being loaded. There is no record on file at ARMA that loading the silos causes violation of the applicable opacity

standard. If such loading does cause violations of the standard the Permittee is required to report such occurrences to the Department.

## B. Control of Particulate

- B1. For each of emissions units FM-3, FM-4 and FM-9: The Permittee shall not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 mg/dscm). [Authority: COMAR 26.11.06.03B(1)(a)]
- B2. For each of emissions units FM-6, FM-8, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16: The Permittee shall not cause or permit particulate matter to be discharged from any installation constructed before January 17, 1972 in excess of the values determined from Table 1 in COMAR 26.11.06.16. When the process weight per hour falls between two values in the table, the maximum weight discharged per hour shall be determined by linear interpolation. Except as allowed in COMAR 26.11.06.03B(1)(b)(ii), when the process weight exceeds 60,000 pounds (27,200 kilograms) per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation:

$$E = 55.0 P^{(0.11)} - 40$$

where E = maximum weight, in pounds, discharged per hour, and P = process weight in tons per hour.

## [Authority: COMAR 26.11.06.03B(1)(b)(i)]

B3. For each of emissions units FM-6, FM-8, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16: For those processes in which the process weight per hour exceeds 60,000 pounds (27,200 kilograms), the maximum allowable weight of particulate matter discharged per hour may exceed that calculated by the equation in COMAR 26.11.06.03B(1)(b)(i) provided that the concentration of particulate matter in the gases discharged to the atmosphere is less than 0.05 gr/scfd (114mg/dscm). [Authority: COMAR 26.11.06.03B(1)(b)(ii)]

## Compliance Demonstration

For each of emissions units FM-3, FM-4, FM-6, FM-9, FM-10, FM-11, FM-13, FM-14, FM-15 and FM-16: The Permittee shall establish in writing, revise as necessary and implement an operations and maintenance (O&M) plan developed and implemented in accordance with Section 1.2 of Table IV-1 of the Part 70 permit.

## Rationale for Periodic Monitoring Strategy

When properly maintained and operated the baghouses, cyclones and bin vent filters associated with the emissions units in the Feed Mill area are designed to provide compliance with all applicable particulate emissions standards and limits during normal process operations. Development and implementation of the required O&M plan will ensure that the control devices are properly maintained and operated.

- B4. For unconfined sources, which include emissions units FM-1, FM-2 and FM-12: The Permittee shall not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision. <a href="Exceptions"><u>Exceptions</u></a>. The requirements stated in this condition do not apply to grain drying and grain handling installations. [Authority: COMAR 26.11.06.03C(1) and COMAR 26.11.06.03C(2)(b)]
- B5. The Permittee shall take reasonable precautions to prevent particulate matter from materials handling and construction operations from becoming airborne. [Authority: COMAR 26.11.06.03D]

### Compliance Demonstration and Rationale for Periodic Monitoring Strategy

For unconfined sources, which include emissions units FM-1, FM-2 and FM-12: The Permittee is required to establish in writing, revise as necessary and implement a best management practices (BMP) plan as described in Section 1.3 of Table IV-1 of the Part 70 permit. Section 1.3 BMP plan requirements have been expanded in the renewal permit to include housekeeping measures and other

methods to minimize dust required for prepared feeds manufacturing facilities at area sources of HAP under 40 CFR 63, Subpart DDDDDDD.

Although the Permittee is a major source of HAP, prepared feed manufacturing facilities at both area and major HAP sources would utilize the same techniques to minimize dust.

The Permittee is required to maintain a copy of the plan on site, and to make a copy of the plan available to the Department upon request. The Permittee is also required to report deviations from procedures prescribed in the BMP plan in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions of the Part 70 permit.

## <u>Table IV – 8 (Grain Receiving – Grain Dryers)</u> – Emissions Units GS-1, GS-2, GS-4, and GS-6, ARMA Registration No. 045-0042-8-0085

- **GS-1:** 84-tons-per-hour Zimmerman® Column Grain Dryer, fired with Propane and/or Natural Gas, equipped with screens, installed 01/1975
- **GS-2:** Two (2) Shanzer® Column Grain Dryers (nos. 4 & 5), 64.22-tons-per-hour each, each fired with Propane and/or Natural Gas, each equipped with screens, each with column plate perforation that does not exceed 2.4 mm diameter, installed in 1965, reconstructed in 1981
- **GS-4:** Two (2) Shanzer® Column Grain Dryers (nos. 2 & 3), 64.22-tons-per-hour each, each fired with Propane and/or Natural Gas, each equipped with screens, each with column plate perforation that does not exceed 2.4 mm diameter, installed in 1965, reconstructed in 1981
- **GS-6:** Two (2) Shanzer® Column Grain Dryers (nos. 6 & 7), 64.22-tons-per-hour each, each fired with Propane and/or Natural Gas, each equipped with screens, each with column plate perforation that does not exceed 2.4 mm diameter, installed in 1965, reconstructed in 1982

## **Permitting History:**

None of the emissions units are subject to nonattainment NSR requirements,
 PSD requirements, or to a synthetic minor limit.

- Each of emissions units GS-2, GS-4 and GS-6 is subject to 40 CFR 60, Subpart DD (NSPS for "Grain Elevators" constructed or reconstructed after August 3, 1978), which includes grain dryers as affected facilities.
- None of the emissions units are subject to any NESHAP promulgated under 40 CFR 61 or 63.
- None of the emissions units are subject to CAM requirements because none of the units are equipped with a control device.

## **Applicable Standards and Limits:**

## A. Visible Emissions Limitations

**40 CFR §60.302(a)(1)** prohibits discharge to atmosphere of any gases that exhibit greater than 0 percent opacity from an affected column grain dryer with column plate perforation exceeding 2.4 mm diameter (ca. 0.094 inch). Emissions units GS-2, GS-4 and GS-6 are exempt from the opacity standard because the plate perforation in each unit does not exceed the applicability level stated in the requirement. The opacity standard does not apply to emissions unit GS-1 because GS-1 was installed prior to the NSPS applicability date.

Note: COMAR 26.11.06.02A(1)(e) establishes that COMAR 26.11.06.02C(1) (which prohibits visible emissions in excess of 20 percent opacity) does not apply to emissions from grain drying and grain handling installations in compliance with the State-only requirements of COMAR 26.11.18.03.

## <u>Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only</u>

The Permittee has demonstrated to the Department that each of emissions units GS-2, GS-4 and GS-6 is exempt from the opacity standard in **40 CFR §60.302(a)(1)** because each emissions unit has a column plate of not more than 2.4 mm diameter. Credible records which demonstrate that the emissions units are exempt are sufficient for this requirement.

## B. Control of Nitrogen Oxides

For each emissions unit identified in Section 8.0 of this table: The Permittee shall:

(1) maintain good operating practices as recommended by the equipment vendor to minimize NO<sub>x</sub> emissions; and

(2) burn only gas in each installation, where gas is available, during the period May 1 through September 30 of each year.

[Authority: COMAR 26.11.09.08J(1)&J(4)]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

- The Permittee is required to prepare and implement a written in-house training program for all operators of emissions units GS-1, GS-2, GS-4 and GS-6, and such program must include instruction on good operating and maintenance practices for the emissions units. In accordance with COMAR 26.11.09.08B(5)(a), the equipment operator to be trained may be the person who maintains the equipment and makes the necessary adjustments for efficient operation.
- The Permittee is required to maintain, and make available to the Department upon request, the written in-house operator training program required under COMAR 26.11.09.08J(2) and the operator training attendance records that identify each operator trained in accordance with COMAR 26.11.09.08J(2).
- For each of grain dryer the Permittee is required to maintain on site for at least 5 years, and make available to the Department upon request, records of annual fuel use, and records of the types of fuels used in each emissions unit during the period May 1 through September 30 of each year.

COMAR 26.11.09.08 outlines the methods for demonstrating compliance with the requirements. No additional monitoring is required.

<u>Table IV – 9 (Grain Receiving – Grain Handling Operations)</u> – Emissions Units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10, GS-11, GS-12, GS-13, GS-14, GS-15, and GS-16, ARMA Registration No. 045-0042-8-0085

- **GS-3:** Marot® Grain Cleaning Scalper for Dryers 4 & 5, Controlled by MAC Environmental® 14MW Baghouse (BH-1), installed 01/1995; subject to 40 CFR 60, Subpart DD; Baghouse BH-1 is subject to CAM requirements
- **GS-5:** Marot® Grain Cleaning Scalper for Dryers 2 & 3, Controlled by MAC Environmental® 14MW-252 Baghouse (BH-1), installed 01/1995; subject to 40 CFR 60, Subpart DD; Baghouse BH-1 is subject to CAM requirements
- **GS-7:** Marot® Grain Cleaning Scalper for Dryers 6 & 7, Controlled by MAC Environmental® 144MWP-212 Baghouse (BH-2), installed 01/1995; subject to 40 CFR 60, Subpart DD; Baghouse BH-2 is subject to CAM requirements

- **GS-8:** Grain Receiving Truck Pit No. 3 Controlled by MAC Environmental® 14MW-252 Baghouse (BH-1), installed 1960; Baghouse BH-1 is subject to CAM requirements
- **GS-9:** Grain Receiving Truck Pit No. 4 Controlled by MAC Environmental® 14MW-252 Baghouse (BH-1), installed 1960; Baghouse BH-1 is subject to CAM requirements
- **GS-10:** Grain Receiving Truck Pit No. 2 Controlled by MAC Environmental® 144MWP-212 Baghouse (BH-2), installed 1960; Baghouse BH-2 is subject to CAM requirements
- **GS-11:** Grain Receiving Truck Pit No. 1 Controlled by MAC Environmental® 144MWP-212 Baghouse (BH-2), installed 1960; Baghouse BH-2 is subject to CAM requirements
- **GS-12:** Grain Handling System Comprising Bucket Elevators and Covered Belts Controlled by an Oil Spray System (Unconfined Source), installed 01/1982; subject to 40 CFR 60, Subpart DD
- **GS-13:** Grain Load Out Chute by Truck Dump Pit Nos. 1 and 2 (Unconfined Source), installed 08/1965
- **GS-14:** Grain Load Out Chute by Truck Dump Pit Nos. 3 and 4 (Unconfined Source), installed 08/1981; subject to 40 CFR 60, Subpart DD
- **GS-15:** Grain Load Out Chute From Grain Tank No. 7 (Unconfined Source), installed 01/1995; subject to 40 CFR 60, Subpart DD
- **GS-16:** Grain Load Out Rail Chute (Unconfined Source), installed 1/1995; subject to 40 CFR 60, Subpart DD

### **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- None of the emissions units are subject to nonattainment NSR requirements,
   PSD requirements, or to a synthetic minor limit.
- Each of emissions units GS-3, GS-5, GS-7, GS-12, GS-14, GS-15 and GS-16 is subject to 40 CFR 60, Subpart DD (NSPS for "Grain Elevators" constructed

after August 3, 1978), which includes grain handling operations as affected facilities.

None of the emissions units are subject to any NESHAP promulgated under 40 CFR 61 or 63.

• The control devices (baghouses BH-1 and BH-2) associated with emissions units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10 and GS-11 are subject to CAM requirements because the pre-control potential-to-emit for each group of units controlled by one of the baghouses exceeds 100 tons of particulate per year, which is the major source threshold for particulate emissions in Wicomico County. The remaining emissions units are not subject to CAM requirements because either they are not equipped with a control device or they have a pcpte for particulate that is less than 100 tons per year.

## **Applicable Standards and Limits:**

## A. Visible Emissions Limitations

- A1. For each of emissions units GS-3, GS-5 and GS-7: The Permittee shall not cause to be discharged into the atmosphere any non-fugitive process emission which exhibits greater than 0 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(b)(2) and 40 CFR §60.11(c)]
- A2. For emissions unit GS-16: The Permittee shall not cause to be discharged into the atmosphere any fugitive emission which exhibits greater than 5 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(c)(1) and 40 CFR §60.11(c)]
- A3. For each of emissions units GS-3, GS-5, GS-7, GS-12: The Permittee shall not cause to be discharged into the atmosphere any fugitive emission which exhibits greater than 0 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(c)(2) and 40 CFR §60.11(c)]
- A4. For each of emissions units GS-14 and GS-15: The Permittee shall not cause to be discharged into the atmosphere any fugitive emission which exhibits greater than 10 percent opacity. The standard for opacity stated in this condition does not apply during periods of startup, shutdown and malfunction. [Authority: 40 CFR §60.302(c)(3) and 40 CFR §60.11(c)]

Note: COMAR 26.11.06.02.A(1)(e) establishes that COMAR 26.11.06.02C(1) (which prohibits visible emissions in excess of 20 percent opacity) does not apply to emissions from grain drying and grain handling installations in compliance with COMAR 26.11.18.03, which is a State-only enforceable regulation. See Section VI of the Part 70 permit.

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy:

For each of emissions units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10 and GS-11 see Compliance Assurance Monitoring (CAM) requirements below under <u>Control of Particulate</u>.

For each of emissions units GS-12, GS-14, GS-15 and GS-16 (which are unconfined sources) the Permittee is required to conduct observations for visible emissions at least once per month, and such observations are to be conducted in accordance with requirements in Section 1.1 of Table IV-1 of the Part 70 permit. For emissions units GS-14, GS-15 and GS-16, if visible emissions are observed the Permittee is required to use EPA Reference Method 9 to determine if the opacity exceeds an applicable standard in 40 CFR §60.302(c)(1) or (c)(3). The Permittee is required to make records of all required observations and to report occurrences of visible emissions to the Department in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions of the Part 70 permit.

Monthly observations for visible emissions are a sufficient method to determine if emissions are occurring. If emissions are observed, additional monitoring is required to determine if the applicable standards are exceeded. No additional monitoring is required.

## B. Control of Particulate

- B1. For each of emissions units GS-3, GS-5 and GS-7: The Permittee shall not cause or permit particulate matter to be discharged from any installation constructed on or after January 17, 1972 in excess of 0.05 gr/SCFD (115 mg/dscm). [Authority: COMAR 26.11.06.03B(1)(a)]
- B2. For each of emissions units GS-3, GS-5 and GS-7: The Permittee shall not cause to be discharged into the atmosphere any non-fugitive process emission which contains particulate matter in excess of 0.023 g/dscm (ca. 0.01 gr/dscf). [Authority: 40 CFR §60.302(b)(1)]

B3. For each of emissions units GS-8, GS-9, GS-10 and GS-11: The Permittee shall not cause or permit particulate matter to be discharged from any installation constructed before January 17, 1972 in excess of the values determined from Table 1 in COMAR 26.11.06.16. When the process weight per hour falls between two values in the table, the maximum weight discharged per hour shall be determined by linear interpolation. Except as allowed in COMAR 26.11.06.03B(1)(b)(ii), when the process weight exceeds 60,000 pounds (27,200 kilograms) per hour, the maximum allowable weight discharged per hour will be determined by use of the following equation:

 $E = 55.0 P^{(0.11)} - 40$ 

where E = maximum weight, in pounds, discharged per hour, and P = process weight in tons per hour.

[Authority: COMAR 26.11.06.03B(1)(b)(i)]

B4. For emissions units GS-8, GS-9, GS-10 and GS-11: For those processes in which the process weight per hour exceeds 60,000 pounds (27,200 kilograms), the maximum allowable weight of particulate matter discharged per hour may exceed that calculated by the equation in **COMAR**26.11.06.03B(1)(b)(i) provided that the concentration of particulate matter in the gases discharged to the atmosphere is less than 0.05 gr/scfd (114mg/dscm). [Authority: COMAR 26.11.06.03B(1)(b)(ii)]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

Emissions units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10 and GS-11 are point sources that are controlled by 2 baghouses (Permittee designations BH-1 and BH-2), and both baghouses are subject to <u>Compliance Assurance Monitoring (CAM)</u> Requirements.

For baghouse BH-1 (which controls particulate emissions from emissions units GS-3, GS-5, GS-8 and GS-9), and baghouse BH-2 (which controls particulate emissions from emissions units GS-7, GS-10 and GS-11): the Permittee is required to comply with all applicable CAM requirements provided in Tables IV-12, IV-12A and IV-12B of the Part 70 permit. The CAM requirements provide sufficient monitoring to demonstrate compliance.

B5. For unconfined sources, which include emissions units GS-12, GS-13, GS-14, GS-15 and GS-16: The Permittee shall not cause or permit emissions from an unconfined source without taking reasonable precautions to prevent particulate matter from becoming airborne. These reasonable precautions

shall include, when appropriate as determined by the Department, the installation and use of hoods, fans, and dust collectors to enclose, capture, and vent emissions. In making this determination, the Department shall consider technological feasibility, practicality, economic impact, and the environmental consequences of the decision. <a href="Exceptions"><u>Exceptions</u></a>. The requirements stated in this condition do not apply to grain drying and grain handling installations. [Authority: COMAR 26.11.06.03C(1) and COMAR 26.11.06.03C(2)(b)]

B6. The Permittee shall take reasonable precautions to prevent particulate matter from materials handling and construction operations from becoming airborne. [Authority: COMAR 26.11.06.03D]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

For unconfined sources, which include emissions units GS-12, GS-13, GS-14, GS-15 and GS-16: The Permittee is required to establish in writing, revise as necessary and implement a best management practices (BMP) plan as described in Section 1.3 of Table IV-1 of the Part 70 permit. The Permittee is required to maintain a copy of the plan on site, and to make a copy of the plan available to the Department upon request. The Permittee is also required to report deviations from procedures prescribed in the BMP plan in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions of the Part 70 permit. A BMP plan that outlines the reasonable precaution methods that are used to minimize particulate from unconfined sources is sufficient to demonstrate that the Permittee is complying with the requirement.

Note: As is stated in condition B5, COMAR 26.11.06.03C(2)(b) exempts grain drying and grain handling operations from the requirements in COMAR 26.11.06.03C(1); however COMAR does not define "grain handling operations". 40 CFR 60, Subpart DD includes separate definitions for "grain handling operations", "grain loading station", and "grain unloading station", which suggests that "grain loading" and "grain unloading" operations are distinct from "grain handling" operations.

## <u>Table IV – 10 (Non-NSPS Emergency Generators)</u> Emissions Units EG-1, EG-2, and EG-3

**EG-1:** 1095 horsepower Emergency Generator fired with No. 2 fuel oil, located at the facility's hatcheries, installed 06/1993, ARMA Registration No. 045-0042-9-0077.

**EG-2:** 1095 horsepower Emergency Generator fired with No. 2 fuel oil, located at the facility's hatcheries, installed 06/1993, ARMA Registration No. 045-0042-9-0078.

**EG-3:** 1825 kW Portable Emergency Generator fired with no. 2 fuel oil, installed 2005, ARMA Registration No. 045-0042-9-0132.

## **Permitting History:**

- None of the emissions units have undergone reconstruction or modification since initial construction.
- None of the emissions units are subject to nonattainment NSR requirements, PSD requirements, or to a synthetic minor limit.
- None of the emissions units are subject to any NSPS promulgated under 40 CFR 60.
- None of the emissions units are subject to the major source NESHAP requirements for reciprocating internal combustion engines promulgated under 40 CFR 63, Subpart ZZZZ (provided the emissions units are operated for emergency and maintenance and testing only).
- None of the emissions units are subject to CAM requirements because none of the units are equipped with a control device.

## **Applicable Standards and Limits:**

### A. Visible Emissions Limitations

- A1. For each of emissions units EG-1, EG-2 and EG-3, except as provided under COMAR 26.11.09.05B(4): The Permittee shall not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. [Authority: COMAR 26.11.09.05B(2)]
- A2. For each of emissions units EG-1, EG-2 and EG-3, except as provided under COMAR 26.11.09.05B(4): The Permittee shall not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. [Authority: COMAR 26.11.09.05B(3)]

A3. COMAR 26.11.09.05B(4) provides the following exceptions to the opacity standards established under COMAR 26.11.09.05B(2) and B(3) for stationary internal combustion engine powered equipment: (a) Section B(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system; (b) Section B(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods: (i) Engines that are idled continuously when not in service: 30 minutes; (ii) All other engines: 15 minutes; (c) Sections B(2) and B(3) do not apply while maintenance, repair, or testing is being performed by qualified mechanics. [Authority: COMAR 26.11.09.05B(4)]

## Compliance Demonstration

The Permittee is required to properly maintain and operate each of emissions units EG-1, EG-2 and EG-3, and is required to maintain records of all combustion-related maintenance and repairs performed on the units. The Permittee is also required to report occurrences of visible emissions in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of <u>Section III – Plant Wide Conditions</u> of the Part 70 permit.

### Rationale for Periodic Monitoring Strategy

Properly maintained and operated generators of the size of emissions units EG-1, EG-2 and EG-3 will operate without visible emissions.

## B. Control of Sulfur Oxides

The Permittee shall not burn, sell, or make available for sale any distillate fuel oil with a sulfur content in excess of 0.3 percent by weight. [Authority: COMAR 26.11.09.07A(1)(c)]

Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

The Permittee is required to obtain from, and maintain records of, fuel supplier certificates of analysis that provide the sulfur content of any distillate fuel oil to be burned in any of emissions units EG-1, EG-2 and EG-3. These records are sufficient to determine that the sulfur content of fuels used meets the applicable standard.

## C. Control of Nitrogen Oxides

For each of emissions units EG-1, EG-2 and EG-3, if the Permittee operates the emissions unit for more than 500 hours during a calendar year the Permittee shall perform a combustion analysis on the emissions unit and optimize combustion at least once annually. [Authority: COMAR 26.11.09.08G(1)(b)]

## Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

For each of emissions units EG-1, EG-2 and EG-3 the Permittee is required to maintain records of the hours of operation and records of annual combustion analyses performed on the emissions unit if the emissions unit operates for more than 500 hours during a calendar year. The Permittee is also required to report failures to perform required combustion analyses. Records of operating hours are sufficient to show if the emissions unit operates for more than 500 hours per year and records of combustion analyses performed are sufficient to demonstrate compliance with these requirements.

## D. Control of HAP

- D1. Any operation of emissions units EG-1, EG-2, and EG-3, other than emergency operation and maintenance and testing is prohibited. The Permittee shall obtain an approval from the Department prior to operating the emissions units for emergency demand response purposes or any other operation other than emergency operation and authorized maintenance and testing. [Authority: COMAR 26.11.02.09A and 40 CFR §63.6640(f)]
- D2. There is no time limit on the use of emissions units EG-1, EG-2, and EG-3 in emergency situations. [Authority: 40 CFR §63.6640(f)(1)]
- D3. The Permittee may operate emissions units EG-1, EG-2, and EG-3 for a maximum of 100 hours per calendar year each for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, state, or local standards require maintenance and testing of the emissions units beyond 100 hours per calendar year. [Authority: 40 CFR §63.6640(f)(2) and (f)(2)(i)]

- D4. Except for the initial notification requirements of 40 CFR §63.6645(f), emissions unit EG-3 does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or the General Provisions of 40 CFR 63, Subpart A as a new emergency stationary reciprocating internal combustion engine (RICE) with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii). [Authority: 40 CFR §63.6590(b)(1)(i)]
- D5. Emissions units EG-1 and EG-2 do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or the General Provisions of 40 CFR 63, Subpart A as existing emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii). [Authority: 40 CFR §63.6590(b)(3)(iii)]

Compliance Demonstration and Rationale for Record Keeping and Reporting Requirements Only

Emissions units, EG-1, EG-2, and EG-3 are used for emergency purposes and maintenance and testing requirements only. The Permittee has never requested nor received approval for operation for other purposes such as emergency demand response, deviations in voltage or frequency, or non-emergency situations. As such, the emissions units are exempt from all other requirements under 40 CFR 63, Subparts A and ZZZZ. Records of the hours of operation and the nature of operation (e.g., emergency operation, maintenance, testing) are sufficient to demonstrate that the emissions units are operating for only the purposes allowed.

## <u>Table IV – 11 (NSPS Emergency Generator)</u> – Emission Unit EG-4

**EG-4:** 600 kW model year 2007 KATOLIGHT (Model D600FRY4T2) diesel powered emergency generator that provides emergency power for the facility's Main Boiler Room, installed 10/2009, ARMA Registration No. 045-0042-9-0149.

## **Permitting History:**

- Emissions unit EG-4 has not undergone reconstruction or modification since initial construction.
- Emissions unit EG-4 is not subject to nonattainment NSR requirements,
   PSD requirements, or to a synthetic minor limit.

- Emissions unit EG-4 is subject to NSPS promulgated under 40 CFR 60, Subpart IIII.
- Emissions unit EG-4 is not subject to the NESHAP promulgated under 40 CFR 63, Subpart ZZZZ (provided the emissions unit is operated for emergency and maintenance and testing only).
- Emissions unit EG-4 is not subject to CAM requirements because the unit is not equipped with a control device.

## **Applicable Standards and Limits:**

## A. General Requirements and Control of HAP

- A1. The Permittee shall operate and maintain emissions unit EG-4 according to the manufacturer's written instructions, or procedures developed by the Permittee that are approved by the manufacturer, over the entire life of the generator. Additionally, the Permittee shall change only those settings that are permitted by the manufacturer, and the Permittee shall meet all applicable requirements of 40 CFR Parts 89, 94 and/or 1068. [Authority: 40 CFR §60.4206 and §60.4211(a)]
- A2. The Permittee may operate emissions unit EG-4 for the purpose of maintenance checks and readiness testing provided that such tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the generator. The Permittee shall limit maintenance checks and readiness testing to not more than 100 hours per year.

  The Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emissions unit EG-4 beyond 100 hours per year. [Authority: 40 CFR §60.4211(f)(2)(i) and 40 CFR §63.6640(f)(2)(i)]
- A3. The Permittee shall not operate emissions unit EG-4 for any purposes other than emergency operation and authorized maintenance and testing. The Permittee shall obtain an approval from the Department prior to operating emissions unit EG-4 for emergency demand response purposes or any other operation other than emergency operation and authorized maintenance and testing. [Authority: 40 CFR §60.4211(f), 40 CFR §63.6640(f), and COMAR 26.11.02.09A]

- A4. There is no time limit on the use of emissions unit EG-4 in emergency situations. [Authority: 40 CFR §60.4211(f)(1) and 40 CFR §63.6640(f)(1)]
- A5. Except for the initial notification requirements of 40 CFR §63.6645(f), emissions unit EG-4 does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ or the General Provisions of 40 CFR 63, Subpart A as a new emergency stationary reciprocating internal combustion engine (RICE) with a site rating of more than 500 brake HP located at a major source of HAP emissions that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR §63.6640(f)(2)(ii) and (iii). [Authority: 40 CFR §63.6590(b)(1)(i)]

## B. Visible Emissions Limitations

- B1. Except as provided under COMAR 26.11.09.05B(4), the Permittee shall not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity. [Authority: COMAR 26.11.09.05B(2)]
- B2. Except as provided under COMAR 26.11.09.05B(4), the Permittee shall not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity. [Authority: COMAR 26.11.09.05B(3)]
- B3. COMAR 26.11.09.05B(4) provides the following exceptions to the opacity standards established under COMAR 26.11.09.05B(2) and B(3) for stationary internal combustion engine powered equipment: (a) Section B(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system; (b) Section B(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods: (i) Engines that are idled continuously when not in service: 30 minutes; (ii) All other engines: 15 minutes; (c) Sections B(2) and B(3) do not apply while maintenance, repair, or testing is being performed by qualified mechanics. [Authority: COMAR 26.11.09.05B(4)]

## C. Control of Particulate

The Permittee shall operate such that air emissions from emissions unit EG-4 do not exceed 0.20 grams of particulate per kilowatt-hour (kW-hr). [Authority: 40 CFR §60.4202(a)(2), §60.4205(b) and §89.112]

## F. Control of Carbon Monoxide

The Permittee shall operate such that air emissions from emissions unit EG-4 do not exceed 3.5 grams of CO per kilowatt-hour (kW-hr). [Authority: 40 CFR §60.4202(a)(2), §60.4205(b) and §89.112]

Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is required to operate and maintain the generator in accordance with the manufacturer's written instructions (or with procedures developed by the Permittee that are approved by the manufacturer) over the entire service life of the unit. Additionally, the Permittee may change only those settings that are permitted by the manufacturer, and the Permittee is required to meet all applicable requirements of 40 CFR Parts 89, 94 and/or 1068. The generator is designed to meet all applicable emissions standards and limits when the unit is properly maintained and operated.

The Permittee is required to maintain the following records for the generator:

- For the entire service life of the unit, an operation and maintenance manual provided or approved by the manufacturer of the generator.
- For at least five (5) years, annual records of the following: (a) total hours of operation; (b) hours used for maintenance checks and readiness testing; (c) all combustion-related maintenance and repairs performed on the emissions unit; (d) number of hours operated during emergencies; and (e) results of all required combustion analyses performed.

Such records will provide sufficient basis for determining the Permittee's compliance status with regard to requirements concerning proper maintenance and operation of the generator.

## D. Control of Sulfur Oxides

- D1. The Permittee shall not burn, sell, or make available for sale any distillate fuel oil with a sulfur content in excess of 0.3 percent by weight. [Authority: COMAR 26.11.09.07A(1)(c)]
- D2. The Permittee shall use in emissions unit EG-4 only diesel fuel that meets requirements established for such fuel under 40 CFR §80.510(b), i.e., diesel fuel that has a per-gallon sulfur content that does not exceed 15 ppm, and that either has a minimum per-gallon cetane index of 40 or a maximum pergallon aromatic content of 35 volume percent. [Authority: 40 CFR §60.4207(b)]

## <u>Compliance Demonstration and Rationale for Record Keeping and Reporting</u> Requirements Only

The Permittee is required to obtain from, and maintain records of, fuel supplier certificates of analysis that provide the sulfur content of any distillate fuel oil to be burned in emissions unit EG-4. These records are sufficient to determine that the sulfur content of fuels used meets the applicable standards.

## E. Control of Nitrogen Oxides

- E1. The Permittee shall operate such that air emissions from emissions unit EG-4 do not exceed 6.4 grams per kilowatt-hour (kW-hr) for the combined total of NMHC and NO<sub>x</sub>. [Authority: 40 CFR §60.4202(a)(2), §60.4205(b) and §89.112]
- E2. If the Permittee operates emissions unit EG-4 for more than 500 hours during a calendar year the Permittee shall perform a combustion analysis on the unit and optimize combustion at least once annually. [Authority: COMAR 26.11.09.08G(1)(b)]

## Compliance Demonstration and Rationale for Periodic Monitoring Strategy

The Permittee is required to operate and maintain the generator in accordance with the manufacturer's written instructions (or with procedures developed by the Permittee that are approved by the manufacturer) over the entire service life of the unit. Additionally, the Permittee may change only those settings that are permitted by the manufacturer, and the Permittee is required to meet all applicable requirements of 40 CFR Parts 89, 94 and/or 1068. The generator is designed to meet all applicable emissions standards and limits when the unit is properly maintained and operated.

The Permittee is required to maintain the following records for the generator:

- For the entire service life of the unit, an operation and maintenance manual provided or approved by the manufacturer of the generator.
- For at least five (5) years, annual records of the following: (a) total hours of operation; (b) hours used for maintenance checks and readiness testing; (c) all combustion-related maintenance and repairs performed on the emissions unit; (d) number of hours operated during emergencies; and (e) results of all required combustion analyses performed.

Such records will provide sufficient basis for determining the Permittee's compliance status with regard to requirements concerning proper maintenance and operation of the generator.

## <u>Tables IV – 12, IV – 12A and IV – 12B (Compliance Assurance Monitoring (CAM) Requirements)</u>

	Table IV – 12 (Compliance Assurance Monitoring (CAM))					
12.0	Emissions Unit Numbers of Affected Emissions Units					
	<b>SP-13:</b> French Industries® Soybean Meal Dryer/Cooler, 67 tons-per-hour, Controlled by three (3) Kice® CK-90 Cyclones, installed 06/1995					
	<b>SP-18:</b> Meal/Hull Loadout Area Controlled by a <u>Pneumafil® Baghouse</u> , installed 05/1999					
	<b>FM-8:</b> DL Methionine Storage Tank Controlled by an Alanca Environmental® Baghouse, installed 01/1964					
	<b>FM-13:</b> Ingredient Mixer and Material Handling Equipment Controlled by MAC Environmental® Baghouse, installed 01/1964					
	GS-3: (Marot® Grain Cleaning Scalper for Dryers 4 & 5); GS-5: (Marot® Grain Cleaning Scalper for Dryers 2 & 3); GS-8: (Truck Pit No.3); and GS-9: (Truck Pit No. 4), all of which are controlled by a MAC Environmental® 14MW-252 Baghouse (BH-1)					
	<b>GS-7:</b> (Marot® Grain Cleaning Scalper for Dryers 6 & 7); <b>GS-10:</b> (Truck Pit No. 2); and <b>GS-11:</b> (Truck Pit No. 1), <u>all of which are controlled by a MAC Environmental® 144MWP-212 Baghouse (<b>BH-2</b>)</u>					
	Each control device associated with the emissions units listed in this Section is subject to CAM requirements.					
12.1	Applicable Standards/Limits: Applicable standards and limits:					
	<ul> <li>For emissions units SP-13 and SP-18 are provided in Section 5.1 of Table IV-5 of this Part 70 permit;</li> </ul>					
	For emissions units FM-8 and FM-13 are provided in Section 7.1 of					

## Table IV – 12 (Compliance Assurance Monitoring (CAM))

Table IV-7 of this Part 70 permit; and

• For emissions units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10 and GS-11 are provided in Section 9.1 of Table IV-9 of this Part 70 permit.

## 12.2 Testing Requirements:

- For emissions units SP-13 and SP-18 are provided in Section 5.2 of Table IV-5 of this Part 70 permit;
- For emissions units FM-8 and FM-13 are provided in Section 7.2 of Table IV-7 of this Part 70 permit; and
- For emissions units GS-3, GS-5, GS-7, GS-8, GS-9, GS-10 and GS-11 are provided in Section 9.2 of Table IV-9 of this Part 70 permit.

## **12.3** | Monitoring Requirements:

## A. <u>Visible Emissions</u>:

For each baghouse and cyclone subject to CAM requirements the Permittee shall conduct observations for visible emissions at least once per day when associated emissions units are operating. Such observations shall be conducted in accordance with requirements in Section 1.1 of Table IV-1 of this Part 70 permit. If visible emissions greater than zero percent opacity are observed during an observation, the Permittee shall either initiate immediate shutdown of all installations contributing to the visible emissions or shall:

- (1) inspect all process equipment and control equipment with potential to contribute to the visible emissions;
- (2) where practical, perform within 24 hours all repairs and/or adjustments to all process equipment and control equipment as necessary to eliminate visible emissions;
- (3) make written records of any repairs and/or adjustments to process equipment and control equipment that were necessary to eliminate visible emissions; and

## Table IV – 12 (Compliance Assurance Monitoring (CAM))

- (4) if visible emissions have not been eliminated within 24 hours, either:
  - (a) conduct at least once per day EPA Reference Method 9 visible emissions evaluations for a period of at least 12 minutes per evaluation until visible emissions have been eliminated; or
  - (b) shut down all equipment contributing to the visible emissions, and effect all maintenance and repairs necessary to re-establish operation without visible emissions before re-starting. [Authority: COMAR 26.11.03.06C]

## B. Fan Motor Amperage:

For each fan motor associated with a control device subject to CAM requirements the Permittee shall continuously monitor the amperage drawn by the fan motor when any associated emissions unit is in operation. The acceptable range of amperage for each fan motor associated with a control device subject to CAM requirements is provided in Table IV-12B of this Part 70 permit. When the amperage for a fan motor is found to be without its acceptable range, the Permittee shall inspect all process equipment and control equipment with potential to contribute to the excursion, and shall perform all repairs and/or adjustments to all process equipment and control equipment as necessary to return the amperage to within the acceptable range as soon as practical. [Authority: COMAR 26.11.03.06C]

## 12.4 Record Keeping Requirements:

- A. Visible Emissions:
- A1. The Permittee shall make a written or printable electronic record of each required observation for visible emissions, and each such record shall include identification of the observer, the date of the observation, the time at the start of the observation, the time at the end of the observation if the observation endures for more than 1 minute, and an account of the observer's findings during performance of the observation. [Authority: COMAR 26.11.03.06C]

## Table IV – 12 (Compliance Assurance Monitoring (CAM))

- A2. When visible emissions greater than zero percent opacity are observed during an observation the Permittee shall maintain records of any repairs and/or adjustments to process equipment and control equipment that were necessary to eliminate the visible emissions.

  [Authority: COMAR 26.11.03.06C]
- B. Fan Motor Amperage:
- B1. During normal operation the Permittee shall, at least once per week, make record of the amperage drawn by the fan motor associated with each control device subject to CAM requirements. If the amperage for a fan motor is found to be without its acceptable range, the Permittee shall make record of the amperage drawn by such fan motor at least once per hour until the amperage has been returned to within the acceptable range. [Authority: COMAR 26.11.03.06C]
- B2. When a fan motor amperage is found to be without its acceptable range the Permittee shall make record of any repairs and/or adjustments to process equipment and control equipment that were necessary to return the amperage to within the acceptable range.

  [Authority: COMAR 26.11.03.06C]

## 12.5 Reporting Requirements:

A. Visible Emissions:

The Permittee shall report deviations from CAM requirements concerning visible emissions in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of <a href="Section III – Plant Wide">Section III – Plant Wide</a> Conditions of this Part 70 permit.

B. Fan Motor Amperage

The Permittee shall report deviations from CAM requirements concerning fan motor amperage in accordance with conditions number 4 ("Report of Excess Emissions and Deviations"), and number 9 (Compliance Certification report), of Section III – Plant Wide Conditions of this Part 70 permit.

## Table IV-12A: Compliance Assurance Monitoring (CAM): Monitoring Approach and Performance Criteria

I. Monitoring Approach						
	Visible Emissions & NSPS	Fan Motor Amperage				
A. Indicator	Visible emission (VE) from the baghouse/cyclone will be monitored daily during normal operating conditions utilizing a one minute VE test.	Baghouse: Amperage is measured with an ammeter. It will be continuously measured and manually recorded at least once per week.  Cyclones: NA				
B. Indicator Range	An excursion is defined as the presence of visible emissions equal to or greater than the standard. These trigger an inspection, corrective action, and a reporting requirement as outlined in the "Monitoring Requirements" of Table 12, Section 12.3 of the permit.	Baghouse: High load and low load amperage readings will vary with each baghouse. Values outside of this range would be considered an excursion. See Table 12-B of the permit for these values.  Cyclones: NA				
C. QIP Threshold	Five percent of observations on a single piece of equipment in a 6-month reporting period.	Five percent of the amperage readings without an acceptable range for a single fan motor in a 6-months reporting period.				
II. Performance Criteria						
	Visible Emissions & NSPS	Fan Motor Amperage				
A. Data Representativeness	Observations are made at the baghouse/cyclone exhaust.	Ammeters are located in the motor control center (MCC). The accuracy of the gauge is +/- 3 percent.				

B. Verification of     Operational Status	Visual inspection	Visual inspection
C. QA/QC Practices and Criteria	The observer will be familiar with baghouse and cyclone operations and visible emissions.	The ammeter is calibrated semi-annually.
D. Monitoring Frequency	A one minute VE observation is performed daily.	The ammeter measures continuously and is manually recorded weekly.
E. Data Collection Procedure	The VE observation is documented by the observer and recorded daily.	The ammeter measures continuously. An operator will check the reading at least once per shift.
F. Averaging period	N/A	N/A

## Table IV-12B: Allowed Range for Amperage Drawn by Fan Motors Associated with Control Devices Subject to CAM Requirements

Control Device	Maximum Acceptable Amperage Drawn by Fan Motor Associated with Control Device (amperes)	Minimum Acceptable Amperage Drawn by Fan Motor Associated with Control Device (amperes)
3 Kice® Cyclones associated with emissions unit SP-13	284	171
Pneumafil® Baghouse associated with emissions unit SP-18	86	52
Alanca Environmental® Baghouse associated with emissions unit FM-8	N/A (no fan motor associated with control device)	N/A (no fan motor associated with control device)
MAC Environmental® Baghouse associated with emissions unit FM-13	4.0	2.0
MAC Environmental Baghouse (BH-1) associated with emissions units GS-3, GS-5, GS-8 and GS-9	96	58
MAC Environmental Baghouse (BH-2) associated with emissions units GS-7, GS-10 and GS-11	96	58

COMPLIANCE SCHEDULE

Perdue is currently in compliance with all applicable air quality regulations.

## TITLE IV - ACID RAIN

Not Applicable

## TITLE VI – OZONE DEPLETING SUBSTANCES

Perdue is not subject to Title VI requirements.

## **SECTION 112(r) – ACCIDENTAL RELEASE**

Perdue is not subject to the requirements of Section 112(r).

## PERMIT SHIELD

Perdue requested that a permit shield be expressly included in the Permittee's Part 70 permit. Permit shields are granted on an emission unit by emission unit basis. In this case, a permit shield was granted for each emission unit. A permit shield statement covering all emission units is included in the opening summary statement in Section IV - Plant Specific Conditions of the permit.

## **INSIGNIFICANT ACTIVITIES**

This section provides a list of insignificant emissions units that were reported in the Title V permit application. The applicable Clean Air Act requirements, if any, are listed below the insignificant activity.

(1) No. 35 Fuel burning equipment using gaseous fuels or No. 1 or No. 2 fuel oil, and having a heat input less than 1,000,000 Btu (1.06 gigajoules) per hour;

The 35 small fuel burning units are subject to the following requirements:

COMAR 26.11.09.05A(1), which establishes that the Permittee may not cause or permit the discharge of emissions from any fuel

burning equipment, other than water in an uncombined form, which is greater than 20 percent opacity.

Exceptions: COMAR 26.11.09.05A(2) does not apply to emissions during load changing, soot blowing, start-up, or adjustments or occasional cleaning of control equipment if:

- (a) The visible emissions are not greater than 40 percent opacity; and
- (b) The visible emissions do not occur for more than 6 consecutive minutes in any sixty minute period.

COMAR 26.11.09.07A(1)(c), which establishes that the Permittee may not burn, sell, or make available for sale any distillate fuel with a sulfur content by weight in excess of 0.3 percent.

Stationary internal combustion engines with an output less than 500 brake horsepower (373 kilowatts) and which are not used to generate electricity for sale or for peak or load shaving. The 5 units are as follows: (1) Cummins® diesel fire pump, 400-HP (293.6 kW) installed in 1986, located at the facility's vegetable oil refinery; (2) Onan® emergency generator, 61.2-HP (45kW) installed in 1995, located at the facility's vegetable oil refinery; (3) Martin Machinery® emergency generator, 47.6-HP (35 kW), installed in 1986, located at the facility's vegetable oil refinery; (4) Onan® emergency generator, 27.2-HP (20 kW), installed in 1984, located at the facility's soybean processing plant; and (5) Katolight® emergency generator, 408-HP (300 kW), installed in 1998, located in the vicinity of the facility's water tower.

The 5 emergency internal combustion engines (that are used for emergency back up power only and not for emergency demand response or peak or load shaving) are subject to the following requirements:

(A) COMAR 26.11.09.05E(2), Emissions During Idle Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at idle, greater than 10 percent opacity.

(B) COMAR 26.11.09.05E(3), Emissions During Operating Mode: The Permittee may not cause or permit the discharge of emissions from any engine, operating at other than idle conditions, greater than 40 percent opacity.

## (C) Exceptions:

- COMAR 26.11.09.05E(2) does not apply for a period of 2 consecutive minutes after a period of idling of 15 consecutive minutes for the purpose of clearing the exhaust system.
- 2. COMAR 26.11.09.05E(2) does not apply to emissions resulting directly from cold engine start-up and warm-up for the following maximum periods:
  - a. Engines that are idled continuously when not in service: 30 minutes
  - b. all other engines: 15 minutes.
- 3. COMAR 26.11.09.05E(2) & (3) do not apply while maintenance, repair or testing is being performed by qualified mechanics.
- (D) COMAR 26.11.36.03A(1), which establishes that the Permittee may not operate an emergency generator except for emergencies, testing and maintenance purposes. Note: This requirement is a State-only requirement.
- (E) COMAR 26.11.36.03A(5), which establishes that the Permittee may not operate an emergency generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple unless the engine fails a test and engine maintenance and a re-test are necessary. Note: This requirement is a State-only requirement.
- (F) 40 CFR 63, Subpart ZZZZ which requires the Permittee to comply with the following for each emergency internal combustion engine:

- The Permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first; inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [Authority: 40 CFR §63.6602, §63.6640(a), and Table 2c of Subpart ZZZZ]
- 2. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [Authority: Footnote 1 to Table 2c of Subpart ZZZZ]
- 3. The Permittee has the option to utilize an oil analysis program as follows in order to extend the specified oil change requirement in Table 2c of Subpart ZZZZ:
  - The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of Subpart ZZZZ.
  - b. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content.

- c. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5.
- d. If all of these condemning limits are not exceeded, the Permittee is not required to change the oil. If any of the limits are exceeded, the Permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the Permittee must change the oil within 2 business days or before commencing operation, whichever is later.
- e. The Permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine.
- f. The analysis program must be part of the maintenance plan for the engine.
   [Authority: Footnote 2 to Table 2c of Subpart ZZZZ and 40 CFR §63.6625(i)]
- The Permittee can petition the Department pursuant to the requirements of 40 CFR §63.6(g) for alternative work practices. [Authority: Footnote 3 to Table 2c of Subpart ZZZZ]
- 5. The Permittee must be in compliance with the emission limitations, operating limitations, and other requirements in 40 CFR 63, Subpart ZZZZ that apply to the Permittee at all times. [Authority: 40 CFR §63.6605(a)]
- 6. At all times the Permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the Permittee to make any further efforts to reduce emissions if levels

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required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [Authority: 40 CFR §63.6605(b)]

- 7. The Permittee must operate and maintain the engine and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop the Permittee's own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [Authority: 40 CFR §63.6625(e)]
- The Permittee shall install a non-resettable hour meter if one is not already installed. [Authority: 40 CFR §63.6625(f)]
- 9. The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [Authority: 40 CFR §63.6625(h) and Table 2c of Subpart ZZZZ]
- 10. There is no time limit on the use of an emergency generator in emergency situations. [Authority: 40 CFR §63.6640(f)]
- 11. The Permittee may operate the emergency generator for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.

The Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the Permittee maintains records indicating that federal, State, or local standards require maintenance and testing of the emergency generator beyond 100 hours per calendar year. [Authority: 40 CFR §63.6640(f)(1) and (f)(2)(i).

- 12. The Permittee shall submit all notifications and reports required by 40 CFR 63, Subpart ZZZZ to the Department. [Authority: 40 CFR §63.6645 and §63.6650]
- 13. The Permittee shall keep all records required by 40 CFR 63, Subpart ZZZZ and submit the records to the Department upon request. [Authority: 40 CFR §63.6655 and §63.6660]
- (3) Space heaters utilizing direct heat transfer and used solely for comfort heat;
- Water cooling towers and water cooling ponds unless used for evaporative cooling of water from barometric jets or barometric condensers, or used in conjunction with an installation requiring a permit to operate;
- (5) No. <u>3</u> Unheated VOC dispensing containers or unheated VOC rinsing containers of 60 gallons (227 liters) capacity or less;

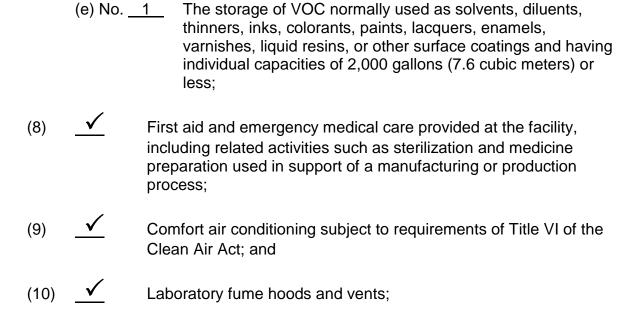
The 3 containers are subject to COMAR 26.11.19.09D, which requires that the Permittee control emissions of volatile organic compounds (VOC) from cold degreasing operations by meeting the following requirements:

(a) COMAR 26.11.19.09D(2)(b), which establishes that the Permittee shall not use any VOC degreasing material that exceeds a vapor pressure of 1 mm Hg at 20 ° C;

- (b) COMAR 26.11.19.09D(3)(a—d), which requires that the Permittee implement good operating practices designed to minimize spills and evaporation of VOC degreasing material. These practices, which shall be established in writing and displayed such that they are clearly visible to operators, shall include covers (including water covers), lids, or other methods of minimizing evaporative losses, and reducing the time and frequency during which parts are cleaned;
- (c) COMAR 26.11.19.09D(4), which prohibits the use of any halogenated VOC for cold degreasing.

The Permittee shall maintain on site for at least five (5) years, and shall make available to the Department upon request, the following records of operating data:

- (a) Monthly records of the total VOC degreasing materials used; and
- (b) Written descriptions of good operating practices designed to minimize spills and evaporation of VOC degreasing materials.
- Brazing, soldering, or welding equipment, and cutting torches related to manufacturing and construction activities that emit HAP metals and not directly related to plant maintenance, upkeep and repair or maintenance shop activities;
- (7) Containers, reservoirs, or tanks used exclusively for:
  (a) No. 4 Storage of butane, propane, or liquefied petroleum, or natural gas;
  (b) No. 1 Storage of lubricating oils;
  (c) No. 12 Storage of Numbers 1, 2, 4, 5, and 6 fuel oil and aviation jet engine fuel;
  - (d) No. \_\_1\_ Storage of motor vehicle gasoline and having individual tank capacities of 2,000 gallons (7.6 cubic meters) or less;



## STATE ONLY ENFORCEABLE REQUIREMENTS

This section of the permit contains state-only enforceable requirements. The requirements in this section will not be enforced by the U.S. Environmental Protection Agency. The requirements in this section are not subject to COMAR 26.11.03 10 - Public Petitions for Review to EPA Regarding Part 70 Permits.

## 1. Applicable Regulations:

- (A) COMAR 26.11.06.08 and 26.11.06.09, which generally prohibit the discharge of emissions beyond the property line in such a manner that a nuisance or air pollution is created.
- (B) COMAR 26.11.15.05, which requires that the Permittee implement "Best Available Control Technology for Toxics" (T BACT) to control emissions of toxic air pollutants.
- (C) COMAR 26.11.15.06, which prohibits the discharge of toxic air pollutants to the extent that such emissions will unreasonably endanger human health.
- (D) COMAR 26.11.18.03A, which establishes particulate control requirements that pertain to grain drying and grain handling installations.

## 2. Operating Conditions:

## (A) For Emissions Unit SP-16 (Soybean Oil Extraction Plant):

Unless the Permittee obtains from the Department written authorization otherwise, the Permittee shall: (a) use in the soybean oil extraction plant (SOEP) only oil extraction solvent that has a n-hexane content that does not exceed 64.4 percent by weight; and (b) operate such that actual loss of oil extraction solvent used in the SOEP does not exceed an average of 3282.8 pounds per operating day during any calendar month.

[Reference: Toxic Air Pollutant Compliance Demonstration prepared by Zephyr Environmental Corporation February 9, 2010, and received at the Department March 9, 2010]

(B) <u>For Emissions Units GS-1, GS-2, GS-4 and GS-6 (Column Grain Dryers)</u>:

The Permittee shall not cause or permit the operation of any grain drying installation unless all exhaust gases discharged pass through a 24 mesh screen or the installation is fitted with other equipment or incorporates design features that will accomplish equally effective results in reducing particulate matter discharge. "Mesh" means Tyler Standard Screen Scale or its equivalent. [Authority: COMAR 26.11.18.03A(1)]

(C) For Emissions Units GS-1, GS-2, GS-4 and GS-6 (Column Grain Dryers) and SP-5, SP-20, GS-3, GS-5, GS-7, GS-8, GS-9, GS-10, GS-11, GS-12, GS-13, GS-14, GS-15 and GS-16 (Grain Handling Operations):

The Permittee shall not cause or permit the operation of any grain drying or handling operation unless the following procedures are used: (a) proper housekeeping and equipment maintenance procedures, including, but not limited to, prompt removal of "beeswing" accumulation by a technique which prevents this material from re-entering the ambient air; and (b) reasonable precautions to minimize emissions from grain receiving, conveyance, or load-out facilities in accordance with good engineering design and operational procedures. [Authority: COMAR 26.11.18.03A(2)]

- (D) <u>For Emissions Units EG-1, EG-2, EG-3 and EG-4 (Emergency Generators)</u>:
- D1. The Permittee shall not operate any emergency generator except for emergencies, testing and maintenance purposes. [Authority: COMAR 26.11.36.03A(1)]
- D2. The Permittee shall not operate any generator for testing and engine maintenance purposes between 12:01 a.m. and 2:00 p.m. on any day on which the Department forecasts that the air quality will be a code orange, code red, or code purple, unless the engine fails a test and engine maintenance and a re-test are necessary. [Authority: COMAR 26.11.36.03A(5)]
- 3. Testing and Monitoring: No additional testing and monitoring requirements
- 4. Record Keeping and Reporting:

The Permittee shall submit to the Department, by April 1 of each year during the term of this permit, a written certification of the results of an analysis of emissions of toxic air pollutants from the Permittee's facility during the previous calendar year. The analysis shall include either:

- (A) a statement that previously submitted compliance demonstrations for emissions of toxic air pollutants remain valid; or
- (B) a revised compliance demonstration, developed in accordance with requirements included under COMAR 26.11.15 & 16, that accounts for changes in operations, analytical methods, emissions determinations, or other factors that have invalidated previous demonstrations.