

Permit #: 28.0505-PSD

Effective Date: May 23, 2017



**SOUTH DAKOTA DEPARTMENT OF
ENVIRONMENT AND NATURAL RESOURCES**

PREVENTION OF SIGNIFICANT DETERIORATION

AIR QUALITY PRECONSTRUCTION PERMIT

A handwritten signature in black ink, appearing to read "S. Pirner".

**Steven M Pirner, Secretary
Department of Environment and Natural Resources**

**Under the South Dakota Air Pollution
Control Regulations**

Pursuant to Chapter 34A-1-21 of the South Dakota Codified Laws and the Air Pollution Control Regulations of the State of South Dakota and in reliance on statements made by the owner designated below, a permit to construct and operate is hereby issued by the Secretary of the Department of Environment and Natural Resources. This permit authorizes such owner to construct and operate the permitted units at the location designated below and under the listed conditions:

A. Owner

1. Company name and address

Ag Processing Inc.
12700 West Dodge Road
Omaha, Nebraska 68154

2. Actual Source Location and Mailing Address if Different from Above

East ½ of Section 9, Township 123N, Range 63W
Brown County

3. Permit Contact

Kelly Jorgensen, Director of Environmental Compliance
(402) 498-5501

4. Facility Contact

Kelly Jorgensen, Director of Environmental Compliance
(402) 498-5501

5. Responsible Official

Mark Craigmile, Senior Vice President of Operations
(402) 498-5564

B. Type of Operation

Soybean processing plant. Whole soybeans will be processed into soybean oil. Additional products include soybean meal and pellets.

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1.0 Standard Conditions

1.1 Construction and operation of source

In accordance with Administrative Rules of South Dakota (ARSD) 74:36:09 and 74:36:20:15(9) the owner or operator shall construct and operate the units, controls, and processes as described in Table 1-1 in accordance with the statements, representations, and supporting data contained in the complete permit application submitted and dated July 26, 2016, unless modified by the conditions of this permit. Except as otherwise provided herein, the control device in Table 1-1 shall be operated in manner that achieves compliance with the conditions of this permit at all times. The application consists of the application forms, supporting data, and supplementary correspondence. If the owner or operator becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in an application, such information shall be promptly submitted.

Table 1-1 – Description of Permitted Units, Operations, and Processes

Unit	Description	Control Device	Nominal Operating Rate
#1	Grain receiving - rail and truck pit #1.	Baghouse	750 tons of soybeans per hour
#2	Grain receiving - truck pit #2.	Baghouse	750 tons of soybeans per hour
#3	Wet bean silo #1	Baghouse	300,000 bushels capacity
#4	Wet bean silo #2	Baghouse	300,000 bushels capacity
#5	Wet bean silo #3	Baghouse	300,000 bushels capacity
#6	Wet bean reclaim	Baghouse	1,200,000 bushels capacity
#7	Wet bean storage bin	Baghouse	1,200,000 bushels capacity
#8	Wet bean storage bin	Baghouse	1,200,000 bushels capacity
#9	Wet bean storage bin	Baghouse	1,200,000 bushels capacity
#10	Bean Heater #1 and #2	Cyclone/Baghouse (2300)	4,500 tons of soybean processed per day
	Bean cleaner aspirators #1 and #2	Baghouse (2300)	
	CCC aspirators #1, #2 and #3		
	CCD aspirators #1, #2 and #3		
	Ground hulls blower BP-3129 and BP-4030		
	Ground overs blower		
	Jet dryers #1, #2 and #3		
	Overs grinder aspiration		
	Prep conveyors		
Secondary aspirators #1 and			

Unit	Description	Control Device	Nominal Operating Rate
	#2		
#11	Flaking aspiration	Baghouse	4,500 tons of soybean processed per day
#12	Finished meal drag #1	Baghouse	4,500 tons of soybean processed per day
	Meal grinder discharge drag #1 and #2		
	Meal grinder		
	Meal surge hopper		
#13	Pellet cooler Pelletizing surge bin	Cyclone/Baghouse	4,500 tons of soybean processed per day
#14	Hull conveyance	Baghouse	4,500 tons of soybean processed per day
	Hull grinders		
	Hull surge bin		
#15	Ground hulls bin #1	Baghouse	15 tons per hour
#16	Ground hulls bin #2	Baghouse	15 tons per hour
#17	Pellet bin #1	Baghouse	18 tons per hour
#18	Pellet bin #2	Baghouse	18 tons per hour
#19	Off spec meal bin	Baghouse	110 tons per hour
#20	Meal silo #1	Baghouse	110 tons per hour
#21	Meal silo #2	Baghouse	110 tons per hour
#22	Meal silo #3	Baghouse	110 tons per hour
#23	Calcium silo	Baghouse	15 tons per hour
#24	Loadout crossover drags	Baghouse	500 tons per hour
	Meal scalper		
	MLO hood		
	Rail MLO baghouse return blower		
#25	Loadout crossover drag	Baghouse	250 tons per hour
	Meal mixer		
	Meal scalper		
	MLO hood		
	Truck MLO baghouse return blower		
#26	Cooling deck #1 and #2	Cyclones	4,500 tons of soybean processed per day
	Dryer decks #1, #2 and #3	Cyclones (3)	
#27	Extraction vent system	Vent condenser	4,500 tons of soybean processed per day
#28	Cooling Tower		10,000 gallons per minute
#29	Boiler #1 fired on natural gas or fuel oil		185 MM Btus per hour
#30	Boiler #2 fired on natural gas or fuel oil		40 MM Btus per hour

Unit	Description	Control Device	Nominal Operating Rate
#31	Emergency fire pump fired on fuel oil		422 horsepower

1.2 Duty to comply

In accordance with ARSD 74:36:09 and 74:36:20:15(12)(a) and (c) the owner or operator shall construct and operate in compliance with the conditions of this permit. An owner or operator who knowingly makes a false statement in any record or report or who falsifies, tampers with, or renders inaccurate, any monitoring device or method is in violation of this permit. A violation of any condition in this permit is grounds for enforcement, reopening this permit, permit termination, or denial of an application to operate. The owner or operator, in an enforcement action, cannot use the defense that it would have been necessary to cease or reduce the permitted activity to maintain compliance. The owner or operator shall provide any information requested by the Secretary to determine compliance or whether cause exists for reopening or terminating this permit.

1.3 Property rights or exclusive privileges

In accordance with ARSD 74:36:09 and 74:36:20:15(12)(b), the issuance of this permit, adoption of design criteria, and approval of plans and specifications does not convey any property rights of any sort, any exclusive privileges, any authorization to damage, injure or use any private property, any authority to invade personal rights, any authority to violate federal, state or local laws or regulations, or any taking, condemnation or use of eminent domain against any property owned by third parties. The State does not warrant the owner’s or operator’s compliance with this permit, design criteria, approved plans and specifications, and operation under this permit, will not cause damage, injury or use of private property, an invasion of personal rights, or violation of federal, state or local laws or regulations. The owner or operator is solely and severally liable for all damage, injury or use of private property, invasion of personal rights, infringement of federal, state or local laws and regulations, or taking or condemnation of property owned by third parties, which may result from actions taken under the permit.

1.4 Penalty for violating a permit condition

In accordance with South Dakota Codified Law (SDCL) 34A-1, a violation of a permit condition may subject the owner or operator to civil or criminal prosecution, a state penalty of not more than \$10,000 per day per violation, injunctive action, administrative permit action, and other remedies as provided by law.

1.5 Inspection and entry

In accordance with SDCL 34A-1-41, the owner or operator shall allow the Secretary to:

1. Enter the premises where a regulated activity is located or where pertinent records are stored;
2. Have access to and copy any records that are required under this permit;
3. Inspect the construction and operations regulated under this permit; and/or
4. Sample or monitor any substances or parameters for the purpose of assuring compliance.

1.6 Severability

In accordance with ARSD 74:36:09 and 74:36:20:15(11), any portion of this permit that is void or challenged shall not affect the validity of the remaining permit requirements.

1.7 Reopening permit

In accordance with ARSD 74:36:20:18 and 74:36:20:19, the Secretary may reopen this permit for further review if the Secretary determines the permit contains a material mistake in establishing the emissions standard or limits or other requirements of the construction permit or the Secretary determines the construction permit must be revised to ensure compliance with the applicable requirements of ARSD 74:36 and the federal Clean Air Act. . The Secretary shall notify the owner or operator 30 days prior to reopening a construction permit or in a shorter time period in an emergency. The reopening of this construction permit shall follow the same procedural requirements to issue a construction permit and shall affect only those parts of the permit for which cause to reopen exist.

1.8 Credible evidence

In accordance with ARSD 74:36:13:07, credible evidence may be used for the purpose of establishing whether the owner or operator has violated or is violation of this permit. Credible evidence is as follows:

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at the source:
 - a. A monitoring method approved for the source pursuant to 40 CFR § 70.6(a)(3) and incorporated in this permit; or
 - b. Compliance methods specified in an applicable plan;
2. The following testing, monitoring, or information gathering methods are presumptively credible testing, monitoring, or information-gathering methods:
 - a. Any monitoring or testing methods approved in this permit, including those in 40 CFR Parts 51, 60, 61, and 75; or
 - b. Other testing, monitoring, or information-gathering methods that produce information comparable to that produced by any method in section (1) or (2)(a).

2.0 Construction and Operating Permit Deadlines

2.1 Commence construction

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(r)(2), the owner or operator shall commence construction within 18 months of the effective date of this permit. If construction is delayed or interrupted for a period of 18 months or more this permit becomes invalid. The owner or operator may apply to the Secretary for an extension before the end of the 18-month period. The Secretary may grant an extension after the owner or operator satisfactorily demonstrates that an extension is justified.

2.2 Submit operating permit application

In accordance with ARSD 74:36:05:08(1), the owner or operator shall submit a complete permit application for a Title V air quality operating permit within 12 months after the initial startup of

the soybean processing facility. For the purpose of this permit condition, initial startup means the date when the solvent extraction process begins operation.

3.0 Recordkeeping and Reporting

3.1 Recordkeeping and reporting

In accordance with ARSD 74:36:09:02 and 74:36:20:15(10), , the owner or operator shall maintain all monitoring data, records, reports, and pertinent information specified by this permit for five years from the date of sample, measurement, report, or application. The records shall be maintained on site for the first two years and may be maintained off site for the last three years. All records must be made available to the Secretary for inspection. All notifications and reports shall be submitted to the following address:

South Dakota Department of Environment and Natural Resources
PMB 2020, Air Quality Program
523 E. Capitol, Joe Foss Building
Pierre, SD 57501-3181

3.2 Construction date notification

In accordance with ARSD 74:36:09 and 74:36:20:15(10), as referenced to ARSD 74:36:05:16.01(9), the owner or operator shall notify the Secretary of the date construction commences on the permanent structures for the soybean oil processing facility. The notification shall be postmarked within 15 days after the date construction commenced.

3.3 Initial startup notification

In accordance with ARSD 74:36:09:02 and 74:36:20:15(10), the owner or operator shall notify the Secretary of the actual date of the initial startup of the soybean oil processing facility. The notification shall be postmarked within 15 days after the date of initial startup. Initial startup is the first date that the soybean oil extraction process begins operating.

3.4 Certification statement

In accordance with ARSD 74:36:09:02, and 74:36:20:15(10), as all documents required by this permit, including reports, must be certified by a responsible official or a duly authorized representative. The certification shall include the following statement:

“I certify that based on information and belief formed after reasonable inquiry the statements and information in this document and all attachments are true, accurate, and complete.”

3.5 Reporting permit violations

In accordance with ARSD 74:36:20:15(10), the owner or operator shall report all permit violations. A permit violation should be reported as soon as possible, but no later than the first business day following the day the violation was discovered. The permit violation may be reported by telephone to the South Dakota Department of Environment and Natural Resources at (605) 773-3151 or by FAX at (605) 773-5286.

A written report shall be submitted within five days of discovering the permit violation. Upon prior approval from the Secretary, the submittal deadline for the written report may be extended up to 30 days. The written report shall contain:

1. A description of the permit violation and its cause(s);
2. The duration of the permit violation, including exact dates and times; and
3. The steps taken or planned to reduce, eliminate, and prevent reoccurrence of the permit violation.

4.0 Best Available Control Technology (BACT) Limits

4.1 BACT limits for particulate matter

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(3), the owner or operator shall not allow the emissions of particulate matter in excess of the emission limits specified in Table 4-1 for the appropriate permitted unit, operation, and process.

Table 4-1 BACT Limits for Particulate Matter ¹

Unit	Emission Point	BACT Emission Rate (grains per dry standard cubic foot)		
		PM	PM ₁₀	PM _{2.5}
#1	Bean receiving rail/truck	0.004	0.004	0.004
#2	Bean receiving truck #2	0.004	0.004	0.004
#3	Wet bean silos	0.004	0.004	0.004
#4	Wet bean silos	0.004	0.004	0.004
#5	Wet bean silos	0.004	0.004	0.004
#6	Wet bean reclaim	0.004	0.004	0.004
#7	Wet bean storage bins 1	0.004	0.004	0.004
#8	Wet bean storage bin #2	0.004	0.004	0.004
#9	Wet bean storage bin #3	0.004	0.004	0.004
#10	Bean heaters #1 and #2	0.013	0.013	0.013
	Final exhaust baghouse (aspiration)	0.0073	0.0073	0.0025
#11	Flaking aspiration	0.008	0.008	0.008
#12	Meal grinder	0.004	0.004	0.004
#13	Pelleting	0.005	0.005	0.005
#14	Hull conveyance, grinders, surge bin	0.004	0.004	0.004
	Hull grinding	0.004	0.004	0.004
#15	Ground hulls bin #1	0.004	0.004	0.004
#16	Ground hulls bin #2	0.004	0.004	0.004
#17	Pellet bins #1	0.004	0.004	0.004
#18	Pellet bins #2	0.004	0.004	0.004
#19	Off spec meal bin	0.004	0.004	0.004
#20	Meal silos #1	0.004	0.004	0.004

Unit	Emission Point	BACT Emission Rate (grains per dry standard cubic foot)		
		PM	PM ₁₀	PM _{2.5}
#21	Meal silos #2	0.004	0.004	0.004
#22	Meal silos #3	0.004	0.004	0.004
#23	Calcium silo	0.004	0.004	0.004
#24	Rail meal loadout	0.004	0.004	0.004
#25	Truck meal loadout	0.004	0.004	0.004
#26	Dryer cooler	0.015	0.015	0.015
	Final cooler deck	0.06	0.02	0.02
#28	Cooling Tower	See permit condition 4.5		
#29 ²	Boiler #1	Natural Gas – 0.0075 pounds per million Btus Distillate Fuel – 0.0239 pounds per million Btus		
#30 ²	Boiler #2	Natural Gas – 0.0075 pounds per million Btus Distillate Fuel – 0.0239 pounds per million Btus		
#31	Emergency fire pump	New Source Performance Standard – see permit condition 6.4		

¹ – Compliance with the emission limits is based on the average of three test runs based on the performance test procedures and requirements in Chapter 9.0. A stack test shall not be conducted during startup or shutdown. Particulate matter will be measured as filterable material; and

² – Compliance with the emission limits is based on the average of three test runs based on the performance test procedures and requirements in Chapter 9.0. A stack test shall not be conducted during startup or shutdown. Particulate matter will be measured as filterable and condensable material.

4.2 BACT limits for carbon dioxide

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall not allow the emissions of carbon dioxide emissions in excess of the emission limits specified in Table 4-2 for the appropriate permitted unit, operation, and process.

Table 4-2 – Carbon Dioxide BACT Emission Limits

Unit	Description	Carbon Dioxide Emission Limit
#29	Boiler #1	See permit conditions 4.4 5.4 and 5.5
#30	Boiler #2	See permit conditions 4.4 5.4 and 5.5
#31	Emergency fire pump	New Source Performance Standard – see permit condition 6.4

4.3 BACT limits for volatile organic compounds

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall not allow the emissions of volatile organic compounds in excess of the emission limits specified in Table 4-3 for the appropriate permitted unit, operation, and process.

Table 4-3 - BACT Limits for Volatile Organic Compounds

Unit #	Description	BACT Emission Limits	
#27	Hexane Recovery Process ¹	0.145 gallons/ton of soybeans	
#29	Boiler #1 ²	Natural Gas 0.0054 lb/MMBtu	Distillate Fuel 0.0018 lb/MMBtu
#30	Boiler #2 ²	Natural Gas 0.0054 lb/MMBtu	Distillate Fuel 0.0018 lb/MMBtu
#31	Emergency Fire Pump	New Source Performance Standard – see permit condition 6.4	

¹ – Compliance with the emission limit is based on the compliance methodology in the National Emission Standards for Hazardous Air Pollutants Subpart GGGG identified in permit condition 7.1. The emission limit includes startup and shutdown periods, but not malfunctions. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction. A Malfunction Period means a period of time between the beginning and end of a process malfunction and the time reasonably necessary for a source to correct the malfunction; and

² – Compliance with the emission limit is based on a 3-hour average, based on the performance test procedures and requirements in Chapter 9.0. A stack test shall not be conducted during startup or shutdown. VOC measurements are as carbon.

4.4 Boiler efficiency

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall install, operate, and maintain Units #29 and #30 with a thermal efficiency of 80% or greater.

4.5 Cooling tower

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall install, operate, and maintain drift eliminators on Unit #28 so as to achieve a drift loss of 0.0005 percent efficiency.

4.6 Compliance with BACT particulate limits during startup and shutdown

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall operate the pollution control equipment listed in Table 1-1 for particulate matter prior to startup of each applicable emission unit and the pollution control equipment shall remain in operation until after the emission unit has been shutdown

4.7 Leak Detection and Repair Program

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(j)(2), the owner or operator shall prepare and implement a leak detection and repair program. The owner or operator shall meet the minimum requirements in Chapter 12.0.

5.0 Operational Limits

5.1 Pipeline natural gas requirement

In accordance with ARSD 74:36:20:15(9), the owner or operator shall not burn natural gas that

does not meet the definition for pipeline natural gas as defined in 40 CFR § 72.2. Pipeline natural gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally pipeline natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot.

5.2 Sulfur content limit for distillate oil

In accordance with ARSD 74:36:20:15(9), the owner or operator shall not burn distillate oil with a sulfur content greater than 0.0015 percent sulfur by weight in Units #29 and #30.

5.3 Nitrogen oxide emission limit

In accordance with ARSD 74:36:20:15(9), the owner or operator shall not emit into the ambient air greater than 38 tons per 12-month rolling period, including periods of startup and shutdown. The limits in Table 5-1 are established to ensure the long term limit of 38 tons per 12-month rolling period is not exceeded.

Table 5-1 – Nitrogen Oxide Emission Limits

Unit	Description	Nitrogen Oxide Emission Limit
#29	Boiler #1 ¹	32.41 tons per 12-month rolling period ¹
#30	Boiler #2	0.04 pounds/MMBtu ² and permit condition 5.7
#31	Emergency fire pump	New Source Performance Standard – see permit condition 6.4

¹ – Compliance with the emission limit is based on the continuous emission monitoring system in permit condition 10.1

² – Compliance with the emission limit is based upon the results of stack emissions testing in permit condition 9.7

5.4 Fuel oil combustion limit

In accordance with ARSD 74:36:09:02, the owner or operator shall limit the amount of distillate fuel combusted in Units #29 and #30, combined, to 700,000 gallons per 12-month rolling period.

5.5 Natural gas combustion limit

In accordance with ARSD 74:36:09:02, the owner or operator shall limit the amount of natural gas fuel combusted in Units #29 and #30, combined, to 1,826 million cubic feet per 12-month rolling period.

5.6 Soybean processing limit

In accordance with ARSD 74:36:09:02, the owner or operator shall limit the amount of soybeans processed at the facility to 4,500 tons per day on a 12-month rolling average.

5.7 Boiler operational limit

In accordance with ARSD 74:36:09:02, the owner or operator shall not operate Units #29 and #30 simultaneously so as to exceed 250,000 million Btus per year for Unit #30 per 12-month rolling period.

5.8 Monthly records

In accordance with ARSD 74:36:20:15(10), the owner or operator shall calculate and record the

following amounts each month:

1. A summary of the type of fuel and quantity combusted in Units #29 and #30 on a monthly basis. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values;
2. A summary of the hours both Unit #29 and #30 operated simultaneously;
3. A summary of the amount of soybeans processed each month. A 12-month rolling total shall be calculated each month using that month's value and the previous 11-months; and
4. The amount of nitrogen oxide, in tons, emitted into the ambient air from the permitted units during the month. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values. The amount of nitrogen oxide emitted to the ambient air from permitted unit #29 shall be calculated using the continuous emission monitoring system(s). The amount of nitrogen oxide emitted to the ambient air from permitted unit #30 shall be based upon the results of the most recent emissions testing results and the type(s) of fuel combusted. The amount of nitrogen oxide emitted to the ambient air from the emergency fire pump shall be based upon the actual operations and emission calculations in the application.

5.9 Reporting requirements

In accordance with ARSD 74:36:20:15(10), the owner or operator shall submit semi-annual reports to the Secretary. The semi-annual reports shall include a summary of the following information:

1. Name of facility, permit number, reference to this permit condition, identifying the submittal as a quarterly report, and calendar dates covered in the reporting period;
2. A summary of the type of fuel and quantity combusted in Units #29 and #30 on a monthly basis. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values;
3. A summary of the hours both Unit #29 and #30 operated simultaneously;
4. A summary of the amount of soybeans processed each month. A 12-month rolling total shall be calculated each month using that month's value and the previous 11-months;
5. The amount of nitrogen oxide, in tons, emitted into the ambient air from the permitted units during the month. A 12-month rolling total shall be calculated every month using that month's value and the previous 11 months' values. The amount of nitrogen oxide emitted to the ambient air from permitted units shall be calculated using the continuous emission monitoring system(s).

The semi-annual reports must be postmarked no later than 30 days after the end of the reporting period (e.g., June 30th and December 31st).

6.0 New Source Performance Standards

6.1 New source performance standard – Subpart A

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR Part 60, Subpart A, the owner or operator shall comply with all applicable notification, recordkeeping, performance testing, compliance with standards and maintenance requirements, monitoring, general control device

requirements, general notice and reporting requirements, and other general provisions for the new source performance standards.

6.2 New source performance standard – Subpart Db

In accordance with ARSD 74:36:07:04, as referenced to 40 CFR Part 60, Subpart Db, the owner or operator shall comply with all applicable standards, fuel requirements, monitoring, compliance, testing, notification, reporting, and recordkeeping requirements in the standards of performance for industrial-commercial-institutional steam generating units. This permit condition is applicable to Unit #29.

6.3 New source performance standard – Subpart Dc

In accordance with ARSD 74:36:07:05, as referenced to 40 CFR Part 60, Subpart Dc, the owner or operator shall comply with all applicable standards, fuel requirements, monitoring, compliance, testing, notification, reporting, and recordkeeping requirements in the standards of performance for small industrial-commercial-institutional steam generating units. This permit condition is applicable to Unit #30.

6.4 New source performance standard – Subpart IIII

In accordance with ARSD 74:36:07:88, as referenced to 40 CFR Part 60, Subpart IIII, the owner or operator shall comply with all applicable standards, fuel requirements, monitoring, compliance, testing, notification, reporting, and recordkeeping requirements in the standards of performance for stationary compression ignition internal combustion engines. This permit condition is applicable to Unit #31.

6.5 New source performance standard – Subpart DD

In accordance with ARSD 74:36:07:17, as referenced to 40 CFR Part 60, Subpart DD, the owner or operator shall comply with all applicable limits, compliance, monitoring, reporting, and testing requirements in the standards of performance for grain elevators. This permit condition is applicable to Units #1, #2, and #6.

7.0 National Emission Standards for Hazardous Air Pollutants

7.1 National Emission Standards for Hazardous Air Pollutants – Subpart GGGG

In accordance with ARSD 74:36:08:28, as referenced to 40 CFR Part 63, Subpart GGGG, the owner or operator shall comply with all applicable limits, compliance, monitoring, reporting, and testing requirements for emissions during vegetable oil production.

7.2 National Emission Standards for Hazardous Air Pollutants – Subpart Q

In accordance with ARSD 74:36:08:211 as referenced to 40 CFR Part 63, Subpart Q, no owner or operator shall use chromium based water treatment chemicals in an industrial process cooling tower. A cooling water sample residual hexavalent chromium concentration in excess of 0.5 parts per million by weight shall be considered a violation. The owner or operator shall comply with all applicable limits, compliance, monitoring, reporting and testing requirements for emissions during the operation of Unit #28.

7.3 National Emission Standards for Hazardous Air Pollutants – Subpart DDDDD

In accordance with ARSD 74:36:08:123, as referenced to 40 CFR Part 63, Subpart DDDDD, the owner or operator shall comply with all applicable limits, compliance, monitoring, reporting, and testing requirements for emissions from industrial, commercial and institutional boilers and process heaters during vegetable oil production. This permit condition is applicable to Units #29 and #30.

8.0 Other Applicable Limits

8.1 State opacity limit

In accordance with ARSD 74:36:12:01, the owner or operator may not discharge into the ambient air an air contaminant of a density equal to or greater than that designated as 20 percent opacity from any permitted unit, operation, or process listed in Table 1-1. This provision does not apply when the presence of uncombined water is the only reason for failure to meet the requirement.

8.2 Visibility exceedances

In accordance with ARSD 74:36:12:02, an exceedance of the opacity limit in permit condition 8.1 is not considered a violation during brief periods of soot blowing, startup, shutdown, or malfunction. Malfunction means any sudden and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. A failure caused entirely or in part by poor maintenance, careless operation, preventable equipment breakdown, or any other cause within the control of the owner or operator of the source is not a malfunction and is considered a violation.

9.0 Performance Tests

9.1 Performance test may be required

In accordance with ARSD 74:36:11:02, the Secretary may request a performance test. A performance test shall be conducted while operating the unit at or greater than 90 percent of its maximum design capacity, unless otherwise specified by the Secretary. A performance test that is conducted while the unit is operating at less than 90 percent of its maximum design capacity will result in the operation being limited to the percent achieved during the performance test. The Secretary has the discretion to extend the deadline for completion of performance test required by the Secretary if circumstances reasonably warrant but will not extend the deadline past a federally required performance test deadline.

9.2 Test methods and procedures

In accordance with ARSD 74:36:11:01, the owner or operator shall conduct the performance test in accordance with 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M. The Secretary may approve an alternative method if a performance test specified in 40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A, and 40 CFR Part 51, Appendix M is not federally applicable or federally required.

9.3 Representative performance test

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(c), performance tests shall be conducted under such conditions as the Secretary shall specify to the owner or operator based on the representative performance of the unit being tested. The owner or operator shall make available to the Secretary such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

9.4 Submittal of test plan

In accordance with ARSD 74:36:11:01, the owner or operator shall submit the proposed testing procedures to the Secretary at least 30 days prior to any performance test. The Secretary will notify the owner or operator if the proposed test procedures are approved or denied. If the proposed test procedures are denied, the Secretary will provide written notification that outlines what needs to be completed for approval.

9.5 Notification of test

In accordance with ARSD 74:36:07:01, as referenced to 40 CFR § 60.8(d), the owner or operator shall notify the Secretary at least 30 days prior to the start of a performance test to afford the Secretary the opportunity to have an observer present. If there is a delay in conducting the scheduled performance test, the owner or operator shall notify the Secretary as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Secretary by mutual agreement.

9.6 Performance test report

In accordance with ARSD 74:36:05:16.01(9), the owner or operator shall submit a performance test report to the Secretary within 60 days after completing the performance test or by a date designated by the Secretary. The performance test report shall contain the following information:

1. A brief description of the process and the air pollution control system being tested;
2. Sampling location description(s);
3. A description of sampling and analytical procedures and any modifications to standard procedures;
4. Test results;
5. Quality assurance procedures and results;
6. Records of operating conditions during the test, preparation of standards, and calibration procedures;
7. Raw data sheets for field sampling and field and laboratory analyses;
8. Documentation of calculations;
9. All data recorded and used to establish parameters for compliance monitoring; and
10. Any other information required by the test method.

9.7 Initial performance test

In accordance with ARSD 74:36:11:02, the owner or operator shall conduct an initial performance testing on the following units within 60 days of achieving maximum production or

within 180 days of initial startup of the facility:

1. Particulate Matter (PM, PM₁₀, and/or PM_{2.5}) – Units #1, #2, #6, #10, #11, #12, #13, #14, #24, #25, #26, #29 and #30 . AGP will be required to test one of Units #3, #4 and #5 and one of Units #7, #8 and #9.
2. Nitrogen Oxide – Units #30
3. Volatile Organic Compounds –Units #29 and #30

The owner or operator may use the total suspended particulate performance test results as the result for PM₁₀ and PM_{2.5} if the total suspended particulate test demonstrates compliance with PM₁₀ and PM_{2.5} emissions limits.

9.8 Initial test of sulfur content of distillate oil and natural gas

In accordance with ARSD 74:36:11:02, the owner or operator shall obtain the initial fuel supplier certifications. The fuel supplier certification for the first load of ultra-low sulfur distillate oil purchased or received shall include the following information:

1. The name of the oil supplier;
2. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil. Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2. Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6. Specifications for fuel oils are defined in the American Society for Testing and Materials in ASTM D396-78, "Standards Specifications for Fuel Oils"; and
3. A statement that the sulfur content of the oil does not exceed 0.0015 weight percent sulfur.

In the case where a fuel supplier certification is not obtained, the owner or operator shall collect a grab sample from the distillate oil storage tank. The grab sample shall be analyzed to determine the sulfur content of the distillate oil in the storage tank prior to burning the distillate oil.

The owner or operator shall obtain an initial fuel supplier certification certifying that the natural gas purchased or received is classified as pipeline quality natural gas as defined in 40 CFR § 72.2.

10.0 Continuous Emission Monitoring System

10.1 Nitrogen oxide continuous emission monitoring systems

In accordance with ARSD 74:36:07, 74:36:09, and 74:36:13, the owner or operator shall install, calibrate, maintain, and operate continuous emission monitoring system for nitrogen oxide for Unit #29. The continuous emission monitoring system shall report the emission rates in pounds per million Btus and pounds per hour. The continuous emission monitoring system shall measure and record the emissions at all times, including periods of startup, shutdown, malfunctions or emergency conditions. Monitor downtime is allowed for system breakdowns, repairs, calibration checks, zero and span adjustments, and when the emission unit is not in

operation. The continuous emission monitoring systems shall meet the performance specifications in 40 CFR Part 75, Appendix A and the quality assurance requirements in 40 CFR Part 75, Appendix B.

11.0 Ambient Air Monitoring Requirements

11.1 Ozone ambient air monitoring

In accordance with 74:36:09:02, as referenced to 40 CFR § 52.21(m), the owner or operator shall conduct a post-construction ambient air monitoring project. The ambient air monitoring project will include collecting hourly concentrations for ozone and include the operation of a meteorological monitor for wind speed, wind direction, temperature, humidity and pressure. The post-construction ambient air monitoring project shall occur during the first calendar year following the start-up of the facility modification. The air monitoring site location shall be approved by the Secretary before the site is setup. A quality assurance project plan will be submitted at least 30 days before the start of the air monitoring project and must be approved by the Secretary before sampling begins.

11.2 EPA reference ozone monitoring equipment and methods

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR § 52.21(m), a minimum of one continuous monitor providing hourly averages shall be operated using EPA reference or equivalent ozone monitoring equipment and methods. The monitoring site shall be located downwind and within the area of expected highest ozone concentrations. Downwind is determined by the predominate summer daytime wind direction from the facility for the ozone season.

12.0 Leak Detection and Repair Program

12.1 LDAR applicability

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR §52.21(j)(2), the equipment that is applicable to conditions 12.2 through 12.4 are those in volatile organic compound service. Volatile organic compound service means a piece of equipment that contains a fluid (gas or liquid) that is at least 5 percent by weight of a volatile organic compound.

12.2 LDAR recordkeeping requirement

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR §52.21(j)(2), the owner or operator shall implement the following record keeping requirements:

1. Maintain a log of each pump, valve, flange, and compressor in volatile organic compound service;
2. Record once per day each inspection of the equipment in volatile organic compound service;
3. Record once per day a reading of each flammable gas monitor required in permit condition 12.3.2; and

4. If leaks are detected, record the nature and extent of the leak along with documentation regarding corrective action.

12.3 Monitoring requirement

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR §52.21(j)(2), the owner or operator shall implement the following monitoring requirements:

1. Monitor, each pump, valve, flange, and compressor in volatile organic compound service on a daily basis for a leak based on sight, sound or smell; and
2. Install, operate, and maintain a minimum of four (4) fixed-location flammable gas monitors in the solvent extraction area. The fixed location monitors shall be placed in low lying areas in close proximity to the equipment in volatile organic compound service. The monitors shall be set to audibly and visually alarm at a reading of 500 parts per million of hexane. Spare monitors shall be maintained to ensure continuous monitoring.

12.4 Correction action requirement

In accordance with ARSD 74:36:09:02, as referenced to 40 CFR §52.21(j)(2), the owner or operator shall implement the following in case of equipment that is determined to be leaking:

1. An initial attempt at repair of equipment found to be leaking shall be made within 15 days after detecting the leak; and
2. Delay of repair may occur if the repair is technically infeasible without a process unit shutdown. Repair of the equipment shall occur before the end of the next process unit shutdown.