NORTH Dakota | Environmental Quality
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March 20, 2025

Mr. Chris Anderson
EHS Sr. Specialist
Cargill, Inc
250 Seventh Avenue NE
West Fargo, ND 58078

Re: Air Quality
Title V (Renewal)
Permit to Operate

Dear Mr. Anderson:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Environmental Quality has reviewed your permit application dated February 8, 2024, for Cargill Oilseeds Processing located in Cass County, North Dakota.

Enclosed is a copy of the Department's draft/proposed Title V Permit to Operate and statement of basis for the facility. Before making final determinations on the permit application, the Department provides for public comment by means of the enclosed public notice, to be immediately followed by a 45-day Environmental Protection Agency (EPA) review period. As indicated in the notice, the 30-day public comment period will begin April 3, 2025 and end May 2, 2025.

If any changes are subsequently made to the draft permit, then a review copy of the proposed permit reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review period is scheduled to begin May 3, 2025 and end June 16, 2025.

All comments received will be considered in the final determination concerning issuance of the permit. The Department will take final action on the permit application following the public comment period and the EPA review period. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5218 or email kkschneider@nd.gov.

Sincerely,

Kyla K. Schneider
Environmental Scientist
Division of Air Quality

KKS:
Enc:
xc/enc: EPA Region 8, Air Permitting (email – r8airpermitting@epa.gov)

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
TITLE V
PERMIT TO OPERATE

Take notice that the North Dakota Department of Environmental Quality (NDDEQ) proposes to issue a renewed Air Pollution Control Permit to Operate to Cargill, Inc. for operation of Cargill Oilseeds Processing in accordance with the ND Air Pollution Control Rules. Cargill Oilseeds Processing produces highly refined vegetable oils and meal from oilseeds and is located in West Fargo, North Dakota. The Cargill, Inc. mailing address is 250 Seventh Avenue NE, West Fargo, ND 58078. The draft renewal permit incorporates ACP-18261 v1.0 and remaining activities permitted by ACP-18102 v1.0 and ACP-17876 v1.0.

A thirty-day public comment period for the draft permit will begin April 3, 2025, and end on May 2, 2025. Direct comments in writing to the NDDEQ, Division of Air Quality, 4201 Normandy Street 2nd Floor, Bismarck, ND 58503-1324 or email AirQuality@nd.gov, Re: Public Comment Permit No. AOP-28376 v6.0. Please note that, to be considered, comments submitted by email must be sent to the email address listed; comments sent to any other email address **will not** be considered. Comments must be received by 11:59 p.m. central time on the last day of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDEQ. Requests for a public hearing must be received in writing by the NDDEQ before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDEQ address and at the Division of Air Quality website at https://deq.nd.gov/AQ/PublicCom.aspx. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Kyla Schneider at (701)328-5218 or emailing kkschneider@nd.gov.

The NDDEQ will consider every request for reasonable accommodation to provide an accessible meeting facility or other accommodation for people with disabilities, language interpretation for people with limited English proficiency (LEP), and translations of written material necessary to access programs and information. Language assistance services are available free of charge to you. To request accommodations or language assistance, contact the NDDEQ Non-discrimination/EJ Coordinator at 701-328-5150 or deqEJ@nd.gov. TTY users may use Relay North Dakota at 711 or 1-800-366-6888.

Dated this 20th day of March 2025

James L. Semerad
Director
Division of Air Quality

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AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE

Permittee: **Name:** Cargill, Inc. Oilseeds Processing **Address:** 250 Seventh Avenue NE West Fargo, ND 58078	**Permit Number:** AOP-28376 v6.0 **Source Name:** Cargill Oilseeds Processing
Source Location: 250 Seventh Avenue NE West Fargo, ND Cass County	**Source Type:** Seed; Oil
Expiration Date: August 12, 2029	

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota, Article 33.1-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Title V Permit to Operate is hereby issued authorizing such permittee to operate the emissions units at the location designated above. This Title V Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Renewal: TBD

James L. Semerad
Director
Division of Air Quality

Cargill Oilseeds Processing
Title V Permit to Operate
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Permit Shield

Compliance with the terms and conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

- Such applicable requirements are included and are specifically identified in this permit; or
- The Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source and the determination or a concise summary thereof is included in this permit.

Applicable Requirement: NDAC 33.1-15-14-06.5.f(1)

1. **Emission Unit Identification**:

The emission units regulated by this permit are as follows:

Table 1.1 Emission Unit Identification

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Gerber Industry Model #75 oilseeds rail/truck receiving Pit #1 rated at 200 metric tons/hr maximum	1	DC-1	Cyclone
Gerber Industry Model #75 oilseeds truck receiving Pit #2 rated at 200 metric tons/hr maximum	2	DC-2	Cyclone
Weigh hopper rated at 200 metric tons/hr maximum	3 [B]	DC-5	Cyclone
Four receiving legs rated at 200 metric tons/hr maximum	4 [B]	DC-6	Cyclone
Two seed scalpers, two cleaner legs, shakers A & B, each rated at 150 metric tons/hr maximum	5 [B] & 5A [B]	DC-3	Cyclone
Skim air from two seed cleaners A & B, each rated at 150 metric tons/hr maximum	6 [B] & 6A [B]	DC-4	Cyclone
Dryer A leg rated at 150 metric tons/hr maximum	7 [B]	DC-7	Cyclone
Dryer B leg, rated at 150 metric tons/hr maximum	8 [B]	DC-8	Cyclone
Town & Country natural gas/propane -fired oilseeds dryer (Dryer A) rated at 42 x 10^6 Btu/hr nominal	9 [B]	Fugitive	None
Town & Country natural gas/propane -fired oilseeds dryer (Dryer B) rated at 42 x 10^6 Btu/hr nominal	10 [B]	Fugitive	None
Prep process scale rated at 75 metric tons/hr maximum	11 [B]	DC-9	Cyclone
Seed conveying leg rated at 75 metric tons/hr maximum	11A [B]		
Two scalper/cleaners each rated at 75 metric tons/hr maximum	12 [B]		
16 decorticators each rated at 75 metric tons/hr maximum	13 [B]		
Hulls scale 100 rated at 8 metric tons/hr maximum	15 [B]		
Two Kice primary aspirators each rated at 18.75 metric tons/hr maximum	16	DC-10	Cyclone (inherent process equipment)

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Two Kice primary aspirators each rated at 18.75 metric tons/hr maximum	17	DC-11	Cyclone (inherent process equipment)
Kice secondary aspirator rated at 7 metric tons/hr maximum	18 [B]	DC-12	Cyclone (inherent process equipment)
Two Kice secondary aspirators each rated at 7 metric tons/hr maximum	19 [B]	DC-13	Cyclone (inherent process equipment)
Hulls storage tank nominally rated at 8 metric tons/hr	21	DC-25	Cyclone
Hulls receiving pit (HR-1) nominally rated at 8 metric tons/hr	23 [B]	Fugitive	None
Hulls loadout spout (HL-1) nominally rated at 8 metric tons/hr	24 [B]	Fugitive	None
Conditioner with a nominal rated capacity of 1,700 metric tons/day	25 [B]	DC-34	Cyclone
Three flakers with a nominal rated capacity of 600 metric tons/day each	26 [B]	DC-35	Cyclone
Three expellers with a nominal rated at 600 metric tons/day each	27 [B]	DC-36	Cyclone
Expeller cake transfer drag	29 [B]	NV-4	None
Dryer cooler, top, nominally rated at 60 metric tons/hr nominal	30 [B]	DC-28	Cyclone
Dryer cooler, middle, nominally rated at 60 metric tons/hr	31 [B]	DC-29	Cyclone
Dryer cooler, bottom, nominally rated at 60 metric tons/hr	32 [B]	DC-30	Cyclone
Conveying/storage of Filtrol nominally rated at 11 metric tons/hr	33 [B]	DC-17	Bag Filter (inherent process equipment)
Conveying/storage of Filter Aid nominally rated at 3 metric tons/hr	34 [B]	DC-27	Bag Filter (inherent process equipment)
Meal conveyor nominally rated at 60 metric tons/hr	35 [B]	DC-18	Bag Filter (inherent process equipment)
Meal static sifters nominally rated at 60 metric tons/hr	36 [B]		
Four meal grinders nominally rated at 60 metric tons/hr	37 [B]		
Finished meal conveyor nominally rated at 60 metric tons/hr	38 [B]	DC-19	Bag Filter (inherent process equipment)
Carter Day Model #72 RJ finished meal conveyors nominally rated at 150 metric tons/hr	39 [B]	DC-22	Bag Filter (inherent process equipment)
Finished meal weighing hopper nominally rated at 150 metric tons/hr	40 [B]	DC-20	Bag Filter (inherent process equipment)
Finished meal rail loadout nominally rated at 150 metric tons/hr	41 [B]		
Finished meal truck loadout nominally rated at 150 metric tons/hr	42 [B]		

Emission Unit Description [A]	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Foster Wheeler natural gas/hulls-fired boiler nominally rated at 50.3 x 10^6 Btu/hr (built 1981; NESHAP/MACT DDDDD)	43	B-1	Baghouse [C]
International Boiler Works natural gas/landfill gas (LFG)-fired boiler nominally rated at 50 x 10^6 Btu/hr (built 1992; NSPS Dc, NESHAP/MACT DDDDD)	44	B-2	None
Hexane underground storage tank with a capacity of 30,000 gallons	45 [B]	T-84	None [D]
Hexane underground storage tank with a capacity of 30,000 gallons	46 [B]	T-85	None [D]
Extraction and refining system with a processing capacity of approximately 1,700 metric tons of seeds per day	48	DC-33	None [D]
D.C. feed conveyor	50 [B]	NV-50a NV-50b NV-50c NV-50d	None
Seed storage tank	51 [B]	T-51a, b & c	None
Seed storage tank	52 [B]	T-52a, b & c	
GTS Energy Model NUK 800 natural gas/landfill gas-fired boiler nominally rated at 9.9 x 10^6 Btu/hr (deodorizer boiler) (NESHAP/MACT DDDDD)	54 [B]	B-3	None
Seed preparation area vacuum system (housekeeping)	61 [B]	61	Bagfilter
Fly ash tank	62 [B]	62	Bagfilter
Pole barn receiving	63 [B]	63	Cyclone
Refinery cooling tower	64a [B]	64a	None
EVAPCO cooling tower	64b [B]	64b	None
Extraction cooling tower	64c [B]	64c	None
Dryer A & B outlet conveyor and leg rated at 200 metric tons/hr	65 [B]	65	Point-of-Use Dust Collector
Two diesel engine driven emergency fire pumps rated at 460 bhp each (manuf. July 2023; NSPS IIII, NESHAP/MACT ZZZZ)	66 [B, E] & 67 [B, E]	FP-2 & FP-3	None
Natural gas engine driven emergency generator rated at 47 bhp (manuf. Feb. 2018; NSPS JJJJ, NESHAP/MACT ZZZZ)	68 [B, E]	Gen-1	None
Plant-wide hexane bubble (NSPS GGGG)	Plant-wide	Plant-wide	None

A Emission unit descriptions in this permit may include nominal ratings that approximate the unit's capacities, which do not represent limits unless specifically stated in a condition.

B Insignificant or fugitive emission sources (no specific emission limit).

C The baghouse for EU 43 is required for operation only when burning hulls, alone or in combination with other fuels.

D Condensers and a mineral oil scrubber are operated as inherent process equipment to recover solvent from the extraction and refining system and the hexane underground storage tanks. When processing canola seed, Cargill will use a packed bed scrubber as needed to manage odors.

E The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the subpart (40 CFR 60, Subpart IIII, 40 CFR 60, Subpart JJJJ and 40 CFR 63, Subpart ZZZZ) for other than emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with the operating hour limits as specified in the applicable subpart. There is no time limit on the use of emergency stationary RICE in emergency situations [40 CFR 60, Subpart IIII, §60.4211(f), 40 CFR 60, Subpart JJJJ, §60.4243(d) and 40 CFR 63, Subpart ZZZZ, §63.6640(f)]

2. **Applicable Standards, Restrictions and Miscellaneous Conditions**:

A. **Fuel Restrictions**:

1) EU 9 and 10 are restricted to combusting only pipeline quality natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet or commercial propane as defined by the Gas Processors Association.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

2) EU 43 is restricted to combusting only hulls and/or pipeline quality natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet, which ensures compliance with NDAC 33.1-15-06-01.2).

Applicable Requirements: NDAC 33.1-15-14-06.5.b(1) and NDAC 33.1-15-06-01.2

3) EU 44 and 54 are restricted to combusting only pipeline quality natural gas containing no more than 2 grains of sulfur per 100 standard cubic feet and/or landfill gas (LFG).

a) Total LFG usage plant-wide is limited to 900 x 10^6 cubic feet per year (12-month rolling total).

Applicable Requirements: PTC02003, ACP-17206 v1.0 and ACP-18261 v1.0

4) EU 66 and 67 are restricted to combusting only distillate oil containing no more than 0.0015 percent sulfur by weight.

Applicable Requirements: NDAC 33.1-15-14-06.5.b(1) and NDAC 33.1-15-22-03, Subpart ZZZZ

5) EU 68 is restricted to combusting only pipeline quality natural gas (containing no more than 2 grains of sulfur per 100 standard cubic feet.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

B. **Solvent Usage**: The permittee may use solvents not previously approved by the Department provided:

1) Compliance is maintained with the requirements in Condition 3. Emissions Unit Limits, and any other applicable requirements.

2) Approval from the Department is obtained prior to routine usage of solvents not previously approved by the Department.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

C. **Cooling Towers**: The permittee shall not use chromium-based water treatment chemicals in the cooling towers (EU 64a, 64b and 64c).

Applicable Requirements: ACP-17876 v1.0

D. **New Source Performance Standards (NSPS)**: The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-12-02 and 40 CFR 60 subparts in addition to complying with Subpart A – General Provisions.

1) Subpart Dc - Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units (EU 44).

2) Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (EU 66 and 67).

3) Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (EU 68).

Applicable Requirements: NDAC 33.1-15-12-02, Subparts A, Dc, IIII and JJJJ

E. **National Emission Standards for Hazardous Air Pollutants (NESHAP)/Maximum Achievable Control Technology (MACT)**: The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-22-03 and 40 CFR 63 subparts in addition to complying with Subpart A - General Provisions.

1) Subpart GGGG (4G) – National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production (facility-wide).

Applicable Requirements: NDAC 33.1-15-22-03, Subparts A and GGGG

2) Subpart ZZZZ (4Z) - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (EU 66, 67 and 68).

Applicable Requirements: NDAC 33.1-15-22-03, Subparts A and ZZZZ

3) Subpart DDDDD (5D) – National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters (EU 43, 44, and 54).

a) Conduct a tune-up of EU 43 and 44 annually, no later than 13 months after the previous tune-up per §63.7540(a)(10).

b) Conduct a tune-up of EU 54 biennially, no later than 25 months after the previous tune-up per §63.7540(a)(10).

c) If any boiler is installed with a continuous oxygen trim system that maintains an optimum air to fuel ratio, conduct a tune-up every five years per §63.7540(a)(10).

d) For boilers and process heaters (EU 43) that demonstrate compliance with a performance test, maintain the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test.

e) In accordance with the §63.7499 subcategories, EU 44 and 54 are existing units designed to burn "gas 1 fuels" (LFG) and EU 43 is an existing "stoker/sloped grate/others designed to burn kiln-dried biomass/bio-based solid." All units (EU 43, 44 and 54) are also designed to burn natural gas.

Applicable Requirements: NDAC 33.1-15-22-03, Subparts A and DDDDD

F. **Like-Kind Engine Replacement**: This permit allows the permittee to replace the existing engine with a like-kind engine. Replacement is subject to the following conditions.

1) The Department must be notified 10 days after change-out of the engine.

2) The replacement engine shall operate in the same manner, provide no increase in throughput and have equal or less emissions than the engine it is replacing.

3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable federal standards (e.g. NSPS, NESHAP, MACT) triggered by the replacement.

4) The replacement engine is subject to the same state emission limits as the existing engine in addition to any NSPS or MACT emission limit that is applicable.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

3. **Emission Unit Limits**:

A. **Emission Limits**:

Table 3.1 Emission Unit Limits

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
Oilseeds rail/truck receiving Pit #1	1	DC-1	Opacity	20% [A]	33.1-15-03-02
Oilseeds truck receiving Pit #2	2	DC-2	Opacity	20% [A]	33.1-15-03-02
Weigh hopper	3	DC-5	Opacity	20% [A]	33.1-15-03-02
Four receiving legs	4	DC-6	Opacity	20% [A]	33.1-15-03-02
Two seed scalpers, shakers A & B	5 & 5A	DC-3	Opacity	20% [A]	33.1-15-03-02
Two seed cleaners/aspirators A & B	6 & 6A	DC-4	Opacity	20% [A]	33.1-15-03-02
Dryer A leg	7	DC-7	Opacity	20% [A]	33.1-15-03-02
Dryer B leg	8	DC-8	Opacity	20% [A]	33.1-15-03-02
Prep process scale, seed conveying leg, two scalper/cleaners, 16 decorticators and hulls scale	11, 11A, 12, 13 & 15	DC-9	Opacity	20% [A]	33.1-15-03-02
Two primary aspirators	16	DC-10	Opacity	20% [A]	33.1-15-03-02
Two primary aspirators	17	DC-11	Opacity	20% [A]	33.1-15-03-02
Secondary aspirator	18	DC-12	Opacity	20% [A]	33.1-15-03-02
Two secondary aspirators	19	DC-13	Opacity	20% [A]	33.1-15-03-02
Hulls storage tank	21	DC-25	Opacity	20% [A]	33.1-15-03-02
Conditioner	25	DC-34	Opacity	20% [A]	33.1-15-03-02
Three flakers	26	DC-35	Opacity	20% [A]	33.1-15-03-02
Three expellers	27	DC-36	Opacity	20% [A]	33.1-15-03-02
Dryer cooler, top	30	DC-28	Opacity	20% [A]	33.1-15-03-02
Dryer cooler, middle	31	DC-29	Opacity	20% [A]	33.1-15-03-02
Dryer cooler, bottom	32	DC-30	Opacity	20% [A]	33.1-15-03-02
Conveying/storage of Filtrol	33	DC-17	Opacity	20% [A]	33.1-15-03-02
Conveying/storage of Filter Aid	34	DC-27	Opacity	20% [A]	33.1-15-03-02
Meal conveyor, meal static sifters and four meal grinders	35. 36 & 37	DC-18	Opacity	20% [A]	33.1-15-03-02
Finished meal conveyor	38	DC-19	Opacity	20% [A]	33.1-15-03-02
Finished meal conveyors	39	DC-22	Opacity	20% [A]	33.1-15-03-02
Finished meal weighing hopper, finished meal rail loadout, and finished meal truck loadout	40, 41 & 42	DC-20	Opacity	20% [A]	33.1-15-03-02

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
Foster Wheeler boiler	43	B-1	PM/PM_{10}	4.17 lb/hr	ACP-18261 v1.0
			$PM/PM_{10}/PM_{2.5}$	13.24 tons/year (12-month rolling sum)	ACP-18261 v1.0
			Filterable PM (or TSM [B])	0.32 lb/10^6 Btu (or 4.0E-03 lb/10^6 Btu) heat input	33.1-15-22-03, Subpart 5D
			NO_x	20.3 lb/hr	ACP-18261 v1.0
			SO_2	16.8 lb/hr	PTC/PTO G81005 Amend. 1 (6/11/1981) & ACP-18261 v1.0
			CO	460 ppmv (on a dry basis corrected to 3% O_2)	33.1-15-22-03, Subpart 5D
			Hg	0.0000057 lb/10^6 Btu heat input	33.1-15-22-03, Subpart 5D
			HCl	0.022 lb/10^6 Btu heat input	33.1-15-22-03, Subpart 5D
			Opacity	20% [A]	33.1-15-03-02
International Boiler Works boiler	44	B-2	NO_x	8.9 lb/hr	ACP-18261 v1.0
			Hg	40 µg/m^3 - Gas 1 subcategory	33.1-15-22-03, Subpart 5D
			Opacity	20% [A]	33.1-15-03-02
Extraction and refining system	48	DC-33	Hexane (VOC)	0.230 gal/ton seeds processed (12-month avg.)	ACP-18261 v1.0
Feed conveyor	50	NV-50a NV-50b NV-50c NV-50d	Opacity	20% [A]	33.1-15-03-02
Seed storage tank	51	T-51a, b & c	Opacity	20% [A]	33.1-15-03-02
Seed storage tank	52	T-52a, b & c	Opacity	20% [A]	33.1-15-03-02

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
Deodorizer boiler	54	B-3	Hg	40 µg/m^3 - Gas 1 subcategory	33.1-15-22-03, Subpart 5D
			Opacity	20% [A]	33.1-15-03-02
Diesel engine driven emergency fire pumps	66 & 67	FP-2 & FP-3	Opacity	20% [A]	33.1-15-03-02
			Operating Hours	Condition 1 Footnote E	33.1-15-12-02, Subpart 4I & 33.1-15-22-03, Subpart 4Z
Natural gas engine driven emergency generator	68	Gen-1	Opacity	20% [A]	33.1-15-03-02
			Operating Hours	Condition 1 Footnote E	33.1-15-22-03, Subpart 4J & 33.1-15-22-03, Subpart 4Z
Plant-wide hexane bubble	--	--	Hexane	394.2 tons/year (12-month rolling total)	ACP-18261 v1.0
Plant-wide LFG usage	--	--	LFG Usage	900 x 10^6 ft^3/yr (12-month rolling total)	ACP-18261 v1.0

[A] 40% opacity is permissible for not more than one six-minute period per hour.

[B] Total Selected Metals (TSM) - arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium

B. **Fugitive Emissions**: The permittee shall not discharge into the ambient air any air contaminant which exhibits an opacity great than 40% for more than one six-minute period per hour. Such visible emissions shall have been visibly transported off the property of emission origination and remains visible to an observer positioned off said property when sighting along a line which does not cross the property of emission origination.

Applicable Requirement: NDAC 33.1-15-03-03

4. **Monitoring Requirements and Conditions**:

A. **Requirements**:

Table 4.1 Emission Monitoring

Emission Unit Description	EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Oilseeds rail/truck receiving pit	1	Opacity	O&M and VEO	4.B.1 & 4.B.2	33.1-15-14-06.5.a(3)(a)
Oilseeds truck receiving pit	2	Opacity	O&M and VEO	4.B.1 & 4.B.2	33.1-15-14-06.5.a(3)(a)

Emission Unit Description	EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Two primary aspirators	16	Opacity	O&M and VEO	4.B.1 & 4.B.2	33.1-15-14-06.5.a(3)(a)
Two primary aspirators	17	Opacity	O&M and VEO	4.B.1 & 4.B.2	33.1-15-14-06.5.a(3)(a)
Hulls storage tank	21	Opacity	O&M and VEO	4.B.1 & 4.B.2	33.1-15-14-06.5.a(3)(a)
Foster Wheeler boiler	43	$PM/PM_{10}/PM_{2.5}$	CAM, Recordkeeping [A]	4.B.9 & 4.B.12	33.1-15-14-06.10 & ACP-17546 v1.0
		Filterable PM (or TSM)	Emissions Test	4.B.13 & 4.B.14	33.1-15-22-03, Subpart 5D
		NO_x	Emissions Test/O&M	4.B.3	33.1-15-14-06.5.a(3)(a)
		SO_2 (hulls)	Sulfur Analysis	4.B.6	33.1-15-14-06.5.a(3)(a)
		SO_2 (natural gas)	Recordkeeping	4.B.4	33.1-15-14-06.5.a(3)(a)
		CO	Emissions Test	4.B.13 & 4.B.14	33.1-15-22-03, Subpart 5D
		Hg	Emissions Test	4.B.13 & 4.B.14	33.1-15-22-03, Subpart 5D
		HCl	Emissions Test	4.B.13 & 4.B.14	33.1-15-22-03, Subpart 5D
		Opacity	COMS [A]	4.B.5	33.1-15-14-06.5.b(1)
International Boiler Works boiler	44	NO_x	Emissions Test/O&M	4.B.3	33.1-15-14-06.5.a(3)(a)
		Hg	Recordkeeping	4.B.14	33.1-15-22-03, Subpart 5D
		Opacity	Recordkeeping	4.B.4	33.1-15-14-06.5.a(3)(a)
Extraction and refining system	48	Hexane (VOC)	Recordkeeping	4.B.11	33.1-15-14-06.5.a(3)(a) & 33.1-15-22, Subpart 4G
Deodorizer boiler	54	Hg	Recordkeeping	4.B.14	33.1-15-22-03, Subpart 5D
		Opacity	Recordkeeping	4.B.4	ACP-17206 v1.0
Diesel engine driven emergency fire pumps	66 & 67	Opacity	Recordkeeping	4.B.4	33.1-15-14-06.5.a(3)(a)
		Operating Hours	Recordkeeping	4.B.8	33.1-15-12-02, Subpart 4I & 33.1-15-22-03, Subpart 4Z

Emission Unit Description	EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Natural gas engine driven emergency generator	68	Opacity	Recordkeeping	4.B.4	33.1-15-14-06.5.a(3)(a)
		Operating Hours	Recordkeeping	4.B.8	33.1-15-12-02, Subpart 4J & 33.1-15-22-03, Subpart 4Z
Plant-wide hexane bubble	Plant-wide	Hexane	Hexane (VOC) Emissions Calculation	4.B.7	33.1-15-14-06.5.a(3)(a) & 33.1-15-22, Subpart 4G
Plant-wide LFG usage	Plant-wide	LFG Usage	Recordkeeping	4.B.10	ACP-17206 v1.0

A Continuous monitoring and recordkeeping only required when combusting hulls, alone or in combination with other fuels.

B. **Monitoring Conditions**:

1) The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure (developed from the manufacturer's recommended O&M procedures), shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available on site and provide the Department with a copy when requested.

2) Visible Emissions Observation (VEO): At least once per week in which the emission unit is operated, a company representative who is currently or has been certified in accordance with EPA Reference Method 9 or has received Department approved visible emissions training (requires a one-time visible emissions lecture course) shall observe the emission point. If no visible emissions are present, the permittee shall record the date, time and observation results.

a) If the observation indicates visible emissions are present, the permittee must investigate for a potential problem within eight hours. Any problems that are discovered must be corrected as soon as possible. If the correction of the situation is expected to take longer than 24 hours, the permittee shall follow procedures as outlined in Condition 7.G. All instances of visible emissions observed, associated investigations of malfunctions, and corrective actions taken shall be recorded.

[1] Following corrective maintenance, a visible emissions observation shall be made. If no visible emissions are observed, the date and time shall be recorded. If visible emissions are observed, a formal visible emissions evaluation shall be conducted in accordance with Condition 4.B.2)b.

b) If visible emissions are observed for longer than 24 hours, a formal visible emissions evaluation of the emission point shall be conducted to determine if the emissions are in compliance with the applicable opacity standard. Opacity reading shall consist of three consecutive six-minute periods per day of visible emissions using EPA Reference Method 9 and conducted by a certified visible emissions reader.

c) All instances of visible emissions, investigations of malfunctions and corrective actions shall be recorded. The permittee shall comply with the visible emissions and particulate emission limits and nothing in this condition shall be construed as authorizing otherwise.

3) Within one year of issuance of a renewal permit and to provide a reasonable assurance of compliance, the permittee shall conduct an emissions test to measure NO_x emissions, using EPA Reference Methods in 40 CFR 60, Appendix A or at a minimum a portable analyzer method approved by the Department. A test shall consist of three runs, with each run at least 20 minutes in length. For EU 43, the emissions test shall be conducted when burning natural gas. For EU 44, the emissions test shall be conducted when burning either natural gas or LFG or a combination of natural gas and LFG.

In addition, the manufacturer's recommended operations and maintenance (O&M) procedures, or a site-specific O&M procedure (developed from the manufacturer's recommended O&M procedures), shall be followed to assure proper operation and maintenance of the emission unit. The permittee shall have the O&M procedures available on-site and provide the Department with a copy when requested.

4) For purposes of compliance monitoring, burning of gaseous fuels and distillate oil as outlined in Condition 2.A, shall be considered credible evidence of compliance with any applicable opacity, particulate and SO_2 emission limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of gaseous fuel as outlined in Condition 2.A, for evidence of compliance or noncompliance with any applicable opacity, particulate and SO_2 emission limit, in the event of enforcement action.

5) Continuous Opacity Monitoring System (COMS):

a) Monitoring shall be in accordance with the requirements of 40 CFR 60, Subpart A, Section 60.13, Monitoring Requirements and 40 CFR 60, Appendix F, Procedure 3 - Quality Assurance Procedures for Continuous Opacity Monitoring Systems at Stationary Sources as incorporated by reference into NDAC 33.1-15-12 and 40 CFR 63, Subpart DDDDD as incorporated by reference into NDAC 33.1-15-22-03. The requirements of 40 CFR 60, Appendix F, Procedure 3 include daily calibration checks, quarterly performance audits and annual primary zero alignment under clear path conditions.

b) Within one year of issuance of a renewal permit, the permittee shall conduct quarterly performance audits and annual zero alignments in accordance with 40 CFR 60 Appendix F, Procedure 3. Conformance with the specification for calibration error, Section 13.3 Field Audit Performance Specifications, Paragraph (2) Calibration Error of 40 CFR 60, Appendix B, Performance Specification 1 must be demonstrated. Quarterly assessments may be reduced in frequency to semi-annual with four consecutive quarters of quality-assured data (40 CFR 60 Appendix F, Procedure 3, Section 2.0)

Under this permit term, a second quarterly performance audits and annual zero alignments in accordance with 40 CFR 60 Appendix F, Procedure 3 shall take place no sooner than two years or later than three years from the date of the first.

c) When a failure of the COMS occurs that can be expected to last longer than eight hours, an alternative method, acceptable to the Department, for measuring or estimating the opacity must be undertaken as soon as possible. Timely repair of the continuous opacity monitoring system must be made.

d) The Department may require additional performance audits of the COMS equipment.

6) The sulfur content of the sunflower hulls used as fuel shall be analyzed by a scientifically accepted method for determining the sulfur content in fuel. The permittee shall calculate sulfur dioxide emission rates from the sulfur content of the sunflower hulls using EPA emission factors or other methods approved by the Department. For monitoring the sulfur content of the sunflower hulls, an analysis shall be conducted at the beginning of each crop year and the results used for calculating emissions until the next year's crop arrives.

7) By the 15th day of each month the owner/operator shall calculate and record the hexane solvent usage at the facility for the previous month. If the calculated hexane emissions for the previous 12-month period exceed 394.2 tons, the owner/operator shall contact the department by the 25th day of the month in which the calculations were made.

8) A log shall be kept of the total hours of operation on a calendar year basis for each of the units. For an emergency engine, records shall be maintained to differentiate between time operated for emergency purposes, maintenance/testing purposes, and other nonemergency purposes.

a) For certified engines, the permittee shall collect operational and maintenance data to demonstrate that the facility complies with the engine manufacturer's emission related written instructions [40 CFR 60.4211(a)].

9) The permittee shall conduct the monitoring, recordkeeping and reporting as required by the applicable subparts of 40 CFR 64 and in accordance with the Compliance Assurance Monitoring Plan (CAM) in Attachment A of this permit. The measured indicators for the emission units subject to CAM are summarized in the table below.

Table 4.2 CAM Indicators

Emission Unit	Control	Indicators	Indicator Range	Frequency
43 (Foster Wheeler boiler)	Baghouse (PM)	Opacity	0% to 10% (daily block avg.)	Continuous while process is operating on hulls, alone or in combination with other fuels

10) The permittee shall record the quantity of LFG usage by the facility in ft^3/month on the first day of every month and determine the quantity of LFG used during the previous 12-month period. Anytime the quantity of LFG used exceeds 900 x 10^6 ft^3/yr, the owner/operator shall notify the Department within 10 working days.

11) The permittee is subject to a solvent loss ratio (SLR) of 0.230 gallons of solvent used/ton of seeds processed, on a 12-month rolling average, by the 2005 Consent Decree (Civil Action Number 05-2037-JMR-ELN) and voluntary limit contained in the June 8, 2007 letter, Comments and Drafts Revision to Title V Permit Number G81005.

a) By the 15th day of each month, the owner/operator shall calculate and record the solvent loss ratio (SLR) in units of gallons of solvent used per ton of seeds processed for the previous month and for the previous 12-month period. Monitoring of hexane emissions and calculation of the SLR shall be in accordance with 40 CFR 63, Subpart GGGG.

b) If the SLR exceeds 0.230 gal/ton of seeds processed on a 12-month average, then the owner/operator shall contact the Department by the 25th day of the month in which the calculation was made.

12) By the 15th day of each month, the owner/operator shall calculate and record the PM/PM_{10}/$PM_{2.5}$ emissions from EU 43 for the previous month and for the previous 12 months. If PM, PM_{10}, or $PM_{2.5}$ emissions for the previous 12-month period exceed 13.24 tons, the owner/operator shall contact the Department by the 25th day of the month in which the calculation was made.

Emissions of PM shall be calculated as follows:

$$PM\ (tons) = (EF_{PM\text{-}HULLS} \times HULLS / 2000) + (EF_{PM\text{-}GAS} \times GAS / 2000)$$

Where:

PM (tons) = PM emissions for the previous month (tons)

$EF_{PM\text{-}HULLS}$ = PM emission factor (in pounds of PM per tons of hulls combusted) for combustion of hulls in EU 43 as obtained from the most recent stack test conducted when combusting hulls in the boiler.

HULLS = Amount of hulls combusted during the previous month (tons)

$EF_{PM\text{-}GAS}$ = PM emission factor (in pounds of PM per million standard cubic feet of natural gas combusted). The emission factor of 7.6 lb of PM per standard cubic feet of natural gas combusted from EPA publication AP-42, Section 1.4 shall be utilized.

GAS = Amount of natural gas combusted during the previous month (million standard cubic feet)

Emissions of PM_{10} shall be calculated as follows:

PM_{10} (tons) = $(EF_{PM10\text{-}HULLS} \times HULLS / 2000) + (EF_{PM10\text{-}GAS} \times GAS / 2000)$

Where:

PM_{10} (tons) = PM_{10} emissions for the previous month (tons)

$EF_{PM10\text{-}HULLS}$ = PM_{10} emission factor (in pounds of PM_{10} per tons of hulls combusted) for combustion of hulls in EU 43 as obtained from the most recent stack test conducted when combusting hulls in the boiler.

HULLS = Amount of hulls combusted during the previous month (tons)

$EF_{PM10\text{-}GAS}$ = PM_{10} emission factor (in pounds of PM_{10} per million standard cubic feet of natural gas combusted). The emission factor of 7.6 lb of PM_{10} per standard cubic feet of natural gas combusted from EPA publication AP-42, Section 1.4 shall be utilized.

GAS = Amount of natural gas combusted during the previous month (million standard cubic feet)

Emissions of $PM_{2.5}$ shall be calculated as follows:

$PM_{2.5}$ (tons) = $(EF_{PM2.5\text{-}HULLS} \times HULLS / 2000) + (EF_{PM2.5\text{-}GAS} \times GAS / 2000)$

Where:

$PM_{2.5}$ (tons) = $PM_{2.5}$ emissions for the previous month (tons)

$EF_{PM2.5\text{-}HULLS}$ = $PM_{2.5}$ emission factor (in pounds of $PM_{2.5}$ per tons of hulls combusted) for combustion of hulls in EU 43 as obtained from the most recent stack test conducted when combusting hulls in the boiler.

HULLS = Amount of hulls combusted during the previous month (tons)

$EF_{PM2.5\text{-}GAS}$ = $PM_{2.5}$ emission factor (in pounds of PM per million standard cubic feet of natural gas combusted). The emission factor of 7.6 lb of $PM_{2.5}$ per standard cubic feet of natural gas combusted from EPA publication AP-42, Section 1.4 shall be utilized.

GAS = Amount of natural gas combusted during the previous month (million standard cubic feet)

13) Conduct all applicable performance tests according to 40 CFR 63, Subpart DDDDD §63.7520 on an annual basis, except as specified in paragraphs (b) through (e), (g), and (h) of §63.7515.

a) Annual performance tests to demonstrate compliance with the filterable PM (or TSM), CO, Hg and HCl must be completed no more than 13 months after the previous performance test, except as specified in paragraphs (b) through (e), (g), and (h) of §63.7515. Performance tests are required to be completed while combusting hulls. A seperate performance test is not required while combusting only pipeline natural gas.

14) Demonstrate continuous compliance with 40 CFR 63, Subpart DDDDD emission limitations, fuel specifications, monitoring and work practice standards in accordance with NDAC 33.1-15-22-03, Subpart DDDDD.

a) In accordance with §63.7555(g), if you elect to demonstrate that the unit (EU 44 and EU 54) meets the specification for mercury for the unit designed to burn gas 1 subcategory, you must maintain monthly records (or at the frequency required by §63.7540(c)) of the calculations and results of the fuel specification for mercury in Table 6 of the subpart.

b) For the boilers subject to a CO emission limit (EU 43) that demonstrate compliance with an O_2 analyzer system as specified in §63.7525(a), maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the CO performance test, as specified in table 8 of the subpart.

5. **Recordkeeping Requirements**:

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.

1) The date, place (as defined in the permit) and time of sampling or measurement.

2) The date(s) testing was performed.

3) The company, entity, or person that performed the testing.

4) The testing techniques or methods used.

5) The results of such testing.

6) The operating conditions that existed at the time of sampling or measurement.

7) The records of quality assurance for emissions measuring systems including but not limited to quality control activities, audits and calibration drifts as required by the applicable test method

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[1]

Table 5.1 Monitoring Records

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
Oilseeds rail/truck receiving pit	1	Opacity	O&M & VEO Data
Oilseeds truck receiving pit	2		
Two primary aspirators	16		
Two primary aspirators	17		
Hulls storage tank	21		
Foster Wheeler boiler	43	PM	CAM Data/Emissions Calculations [A]
		Filterable PM (or TSM)	Emissions Test Data
		NO_x	Emissions Test & O&M Data
		SO_2 (hulls)	Fuel Analysis
		SO_2 (natural gas)	Fuel Type
		Hg	Emissions Test Data
		HCl	Emissions Test Data
		CO	Emissions Test Data
		Opacity	COMS Data [A]
		Operating Load	Recordkeeping
		Excess O_2%	Recordkeeping
		Fuel Usage	Recordkeeping

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
International Boiler Works boiler	44	PM	Fuel Type
		NO_x	Emissions Test Data
		SO_2	Fuel Type
		Opacity	Fuel Type
		Hg/Fuel Usage	Recordkeeping (Monthly Fuel Consumption)
Extraction and refining system	48	Hexane (VOC) Solvent Loss	Solvent Loss Data
Deodorizer boiler	54	Opacity	Fuel Type
		Hg/Fuel Usage	Recordkeeping
Diesel engine driven emergency fire pumps	66 & 67	Opacity	Fuel Type
		Operating Hours	Hours of Operation Data
Natural gas engine driven emergency generator	68	Opacity	Fuel Type
		Operating Hours	Hours of Operation Data
Plant-wide hexane bubble	Plant-wide	Hexane	Emissions Calculations
Plant-wide LFG usage	Plant-wide	LFG Usage	LFG Usage Data

[A] Continuous monitoring and recordkeeping only required when combusting hulls, alone or in combination with other fuels.

B. In addition to requirements outlined in Condition 5.A, recordkeeping for EU 43, 44 and 54 shall be in accordance with the following requirements of NDAC 33.1-15-12, 33.1-15-14 and 33.1-15-22, as applicable:

1) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and Recordkeeping (EU 44)

2) NDAC 33.1-15-14-06.10, §64.9, Reporting and Recordkeeping Requirements, Paragraph (b) General Recordkeeping Requirements (EU 43)

3) NDAC 33.1-15-22-03, Subpart A, §63.10, Recordkeeping and Reporting and Subpart DDDDD, §63.7545-§63.7560, Notification, Reports, and Records (EU 43, EU 44, and EU 54)

Applicable Requirements: NDAC 33.1-15-12, Subparts A and Dc, NDAC 33.1-15-14-06.10 and NDAC 33.1-15-22-03, Subpart DDDDD

C. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings/computer printouts of continuous monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[2]

6. **Reporting**:

A. Reporting for EU 43, 44 and 54 shall be in accordance with the following requirements of NDAC 33.1-15-12, 33.1-15-14 and 33.1-15-22, as applicable:

1) NDAC 33.1-15-12-02, Subpart A, §60.7, Notification and Recordkeeping (EU 44)

2) NDAC 33.1-15-14-06.10, §64.9, Reporting and Recordkeeping Requirements, Paragraph (a) General Reporting Requirements (EU 43)

3) NDAC 33.1-15-22-03, Subpart A, §63.10, Recordkeeping and Reporting and Subpart DDDDD, §63.7545-§63.7560, Notification, Reports, and Records (EU 43, EU 44, and EU 54)

4) Quarterly excess opacity emissions report submission for EU 43 indicating time spent burning hulls, alone or in combination with other fuels, by the 30th day following the end of the calendar quarter. The report does not need to address time periods when EU 43 is combusting only pipeline quality natural gas.

a) Excess opacity emissions are defined as emissions which exceed 20% opacity (6-min avg.), except 40% (6-min avg.) opacity is allowed for not more than one 6-minute period per hour.

Applicable Requirements: NDAC 33.1-15-12, Subparts A and Dc, NDAC 33.1-15-14-06.5a(3)(a), NDAC 33.1-15-14-06.10 and NDAC 33.1-15-22-03, Subpart DDDDD

B. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 5 in a format provided or approved by the Department. All instances of deviations from the permit must be identified in the report. A monitoring report shall be submitted within 45 days after June 30 and December 31 of each year. Reports required by NDAC 33.1-15-22-03, Subpart DDDDD shall be included with this report (§63.7550)

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(c)[1] and [2] and NDAC 33.1-15-22-03, Subpart DDDDD

C. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14-06.5.c(5) within 45 days after December 31 of each year in a format provided or approved by the Department.

Applicable Requirement: NDAC 33.1-15-14-06.5.c(5)

D. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-22, Subpart GGGG (Veg Oil MACT).

Applicable Requirement: NDAC 33.1-15-22-03, Subpart GGGG

E. For emission units where the method of compliance monitoring is demonstrated by an EPA Test Method or a portable analyzer test, the test report shall be submitted to the Department within 60 days after completion of the test. Reference Method 9 test reports are exempt.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(e)

F. The permittee shall submit an annual emission inventory report (AEIR) in a format provided or approved by the Department. This report shall be submitted by March 15 of each year. Insignificant units/activities listed in this permit do not need to be included in the report.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

7. **Facility Wide Operating Conditions**:

A. **Ambient Air Quality Standards**:

1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33.1-15-02, external to buildings, to which the general public has access.

2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33.1-10.

3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.

4) Disclaimer. Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1), 2) and 3) of this condition.

Applicable Requirements: NDAC 33.1-15-02-04 and 40 CFR 50.1(e)

B. **Fugitive Emissions**: The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

Applicable Requirement: NDAC 33.1-15-17

C. **Open Burning**: The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in Section 33.1-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33.1-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33.1-15-04

D. **Asbestos Renovation or Demolition**: Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33.1-15-13.

Applicable Requirement: NDAC 33.1-15-13-02

E. **Requirements for Organic Compounds Gas Disposal**:

1) Any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining or processing operations and which contain hydrogen sulfide shall be incinerated, flared or treated in an equally effective manner before being released into the ambient air.

2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33.1-15-07-02

F. **Rotating Pumps and Compressors**: All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33.1-15-07-01.5

G. **Shutdowns/Malfunction/Continuous Emission Monitoring System Failure**:

1) Maintenance Shutdowns. In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:

a) Identification of the specific facility to be taken out of service as well as its location and permit number.

b) The expected length of time that the air pollution control equipment will be out of service.

c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.

d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.

e) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.

f) Nothing in this subsection shall in any manner be construed as authorizing or legalizing the emission of air contaminants in excess of the rate allowed by this article or a permit issued pursuant to this article.

Applicable Requirement: NDAC 33.1-15-01-13.1

2) Malfunctions.

a) When a malfunction in any installation occurs that can be expected to last longer than 24 hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.

b) Immediate notification to the Department is required for any malfunction that would threaten health or welfare or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the 24-hour state radio emergency number 1-800-472-2121. If calling from out of state, the 24-hour number is 701-328-9921.

c) Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:

[1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.

[2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.

[3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.

[4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.

[5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.

[6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within 30 days of the end of the calendar quarter in which the malfunction occurred or within 30 days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred. The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction. The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33.1-15-01-13.2

3) Continuous Emission Monitoring System Failures. When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33.1-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33.1-15-01-13.3

H. **Air Pollution from Internal Combustion Engines**: The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33.1-15-08-01

I. **Prohibition of Air Pollution:**

1) The permittee shall not permit or cause air pollution, as defined in NDAC 33.1-15-01-04.

2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33.1-15-01-15

J. **Performance Tests:**

1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23.1-06. All tests shall be made, and the results calculated in accordance with test procedures approved or specified by the Department including the North Dakota Department of Environmental Quality Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary and adequate access into stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33.1-15-01-12

3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63, unless otherwise specified by the subpart. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant and shall coordinate a new test date with the Department.

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a), NDAC 33.1-15-12-02 Subpart A (40 CFR 60.8), NDAC 33.1-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33.1-15-22-03 Subpart A (40 CFR 63.7)

K. **Pesticide Use and Disposal**: Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33.1-15-10.

Applicable Requirements: NDAC 33.1-15-10-01 and NDAC 33.1-15-10-02

L. **Air Pollution Emergency Episodes**: When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33.1-15-11.

Applicable Requirements: NDAC 33.1-15-11-01 through NDAC 33.1-15-11-04

M. **Stratospheric Ozone Protection**: The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.

2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.

4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82

N. **Chemical Accident Prevention**: The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

1) Three years after the date on which a regulated substance is first listed under this part; or

2) The date on which a regulated substance is first present above a threshold quantity in a process.

Applicable Requirement: 40 CFR 68

O. **Air Pollution Control Equipment**: The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure developed from the manufacturer's recommended O&M procedures, shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available onsite and provide the Department with a copy when requested.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

P. **Prevention of Significant Deterioration of Air Quality** (40 CFR 52.21 as incorporated by NDAC Chapter 33.1-15-15): If this facility is classified as a major stationary source under the Prevention of Significant Deterioration of Air Quality (PSD) rules, a Permit to Construct must be obtained from the Department for any project which meets the definition of a "major modification" under 40 CFR 52.21(b)(2).

If this facility is classified as a major stationary source under the PSD rules and the permittee elects to use the method specified in 40 CFR 52.21(b)(41)(ii)(a) through (c) for calculating the projected actual emissions of a proposed project, then the permittee shall comply with all applicable requirements of 40 CFR 52.21(r)(6).

Applicable Requirement: NDAC 33.1-15-15-01.2

8. **General Conditions**:

A. **Annual Fee Payment**: The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within 60 days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

B. **Permit Renewal and Expiration**: This permit shall be effective from the date of its issuance for a fixed period of five years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than 18 months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within 60 days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and off-permit changes

that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33.1-15-14-06.4 and NDAC 33.1-15-14-06.6

C. **Transfer of Ownership or Operation**: This permit may not be transferred except by procedures allowed in Chapter 33.1-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

D. **Property Rights**: This permit does not convey any property rights of any sort, or any exclusive privilege.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(d)

E. **Submissions**:

1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to the Department using a format provided or approved by the Department. Physical submittals shall be submitted to:

North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324

2) Any application form, report or compliance certification submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33.1-15-14-06.4.d

F. **Right of Entry**: Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirements: NDAC 33.1-15-14-06.5.c(2) and NDAC 33.1-15-01-06

G. **Compliance**: The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC Chapter 23.1-06 and NDAC 33.1-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC 23.1-06. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(a) and NDAC 33.1-15-14-06.5.a(6)(b)

H. **Duty to Provide Information**: The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(e), NDAC 33.1-15-14-06.6.b(3) and NDAC 33.1-15-14-06.4.b

I. **Reopening for Cause**: The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.

2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

Applicable Requirement: NDAC 33.1-15-14-06.6.f

J. **Permit Changes**: The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(c)

K. **Off-Permit Changes**: A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

1) No such change may violate any term or condition of this permit.

2) Each change must comply with all applicable requirements.

3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.

4) A Permit to Construct under NDAC 33.1-15-14-02 has been issued, if required.

5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33.1-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.

6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(3)

L. **Administrative Permit Amendments**: This permit may be revised through an administrative permit amendment, if the revision to this permit accomplishes one of the following:

1) Corrects typographical errors.

2) Identifies a change in the name, address or phone number of any person identified in this permit or provides a similar minor administrative change at the source.

3) Requires more frequent monitoring or reporting by the permittee.

4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.

5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.

6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

M. **Minor Permit Modification**: This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

1) Does not violate any applicable requirement.

2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.

3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.

4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.

5) Is not a modification under NDAC 33.1-15-12, 33.1-15-13, and 33.1-15-15 or any provision of Title I of the Federal Clean Air Act.

6) Is not required to be processed as a significant modification.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(1)

N. **Significant Modifications**:

1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.

2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United States Environmental Protection Agency, as they apply to permit issuance and permit renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(3)

O. **Operational Flexibility**: The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(2)

P. **Relationship to Other Requirements**: Nothing in this permit shall alter or affect the following:

1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.

2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.

3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.

4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

Applicable Requirements: NDAC 33.1-15-14-06.3 and NDAC 33.1-15-14-06.5.f(3)(a), (b) and (d)

Q. **Severability Clause**: The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(5)

R. **Circumvention**: The permittee shall not cause or permit the installation or use of any device of any means which conceals or dilutes an emission of air contaminants which would otherwise violate this permit.

Applicable Requirement: NDAC 33.1-15-01-08

9. **State Enforceable Only Conditions (not Federally enforceable)**:

A. **General Odor Restriction**: The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33.1-15-16.

Applicable Requirement: NDAC 33.1-15-16

B. **Hydrogen Sulfide Restriction**: The permittee shall not discharge into the ambient air hydrogen sulfide (H_2S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33.1-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33.1-15-16-04

Attachment A

Cargill, Inc. - Oilseeds Processing
Oilseeds Processing Plant
West Fargo, ND

Compliance Assurance Monitoring (CAM) Plan

Foster Wheeler boiler EU 43 – Baghouse

Compliance Assurance Monitoring Plan for the Solid Fuel Boiler Baghouse Cargill, Inc. West Fargo, North Dakota

I. Background

A. Emissions Unit

Description:	Oilseed production biomass fueled boiler[1]
Identification:	EU 43
Facility:	Cargill Oilseeds Processing West Fargo, North Dakota

B. Applicable Permit: Condition, Emission Limit and Monitoring Requirements

Permit# AOP-28376:	Condition #3
Particulate emission limit:	4.17 pounds per hour
Monitoring requirements:	Continuos Opacity Monitoring System (COMS)

C. Control Technology

Baghouse

II. Monitoring Approach

A. Indicator

The boiler is subject to 40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants (NESHAP) for boilers and process heaters at major sources (Major Source Boiler MACT) which became applicable on January 31, 2016. Since this NESHAP was proposed by the EPA after November 15, 1990, emissions standards from this NESHAP do not trigger CAM requirements, as per 40 CFR 64.2(b)(1)(i). Cargill will therefore rely on the pollutant-specific compliance demonstration requirements in the NESHAP to demonstrate that CAM requirements for the PM emissions limits from biomass boilers are satisfied; specifically, Cargill will rely on the opacity monitoring provisions of Subpart DDDDD for solid fuel fired biomass boilers.

Transmissometer visible emissions readings from the COMS will be used as indicators for the proper operation of the control device in controlling particulate matter emissions.

[1] The boiler can fire natural gas as well as biomass, but the CAM plan only applies to biomass because operation of the boiler on natural gas is considered inherently compliant with the particulate limit.

B. Measurement Approach

Visible emissions (opacity) in the stack exhaust will be monitored continuosly by the COMS. Opacity will be determined based on daily block averages in accordance with published USEPA methods.

C. Indicator Range

Cargill will use an opacity indicator range based on daily block averaging period of COMS readings. The indicator levels on a daily block average basis are 0% to 10% opacity.[2]

D. CAM Excursions Defined

An excursion based on opacity is a daily block average above 10% when the boiler is in operation and firing biomass.

E. Performance Criteria

Data representativeness:

An increase in particulate emissions would likely cause an increase in opacity of the exhaust from the baghouse. The COMS opacity measurements are made downstream of the baghouse on the stack. Therefore, a detected increase in opacity would indicate increased particulate emissions.

Verification of operational status:

The monitoring equipment will be maintained in good working condition according to the manufacturer's O&M procedures.

QA/QC practices and criteria:

A performance evaluation of the COMS shall be conducted in accordance with monitoring conditions as defined by the facility's Title V permit.

Any recorded daily block average opacity greater than 10% will signify an excursion. When a reportable excursion occurs, corrective action will be initiated within 8 hours, beginning with an evaluation of the occurrence to determine the action required to correct the situation. After corrective action has been taken, opacity readings shall be taken again and compared to the indicator range. If the daily block average opacity readings are below 10%, no additional action is required. If the opacity requirements are not met, the investigation process will

[2] One average will be recorded for every 24-hour period starting at 12:00 AM.

begin again as outlined above.

Monitoring frequency and data collection procedure:

A company representative will review the COMS transmissometer visible emissions readings and specific power levels once per day.

III. Justification

A. Background

This facility processes various oilseeds to extract vegetable oils. The pollutant specific emission unit is the biomass (hulls, etc.) fueled boiler that produces process steam for the facility. A baghouse controls the boiler's particulate emissions.

B. Rationale for Selection of Performance Indicator

The transmissometer visible emissions reading from the COMS was selected as the performance indicator because it is consistent with 40 CFR 63 Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for boilers and process heaters at major sources (Major Source Boiler MACT) which became applicable on January 31, 2016.[3] The transmissometer visible emissions reading from the COMS is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. An increase in visible emissions indicates reduced performance of the baghouse. Therefore, the detection of excessive visible emissions is used as the performance indicator.

C. Rationale for Selection of Indicator Level

The use of opacity as the indicator is consistent with the monitoring requirement under Major Source Boiler MACT which became applicable on January 31, 2016. Under Major Source Boiler MACT, EU 43 is subject to a PM (filterable) limit along with an elected opacity indicator given in the rule as 10% opacity on a daily block average.[4] Because an opacity standard applies to EU 43 upon the compliance date of Major Source Boiler MACT, Cargill has elected to use a daily block average limit as an indicator range, per 40 CFR 64.3(d)(3)(ii). Through conversation with NDDEQ, Cargill will use 10% opacity given in the rule on a daily block average limit in order to ensure compliance with the permit limit. Low opacity measurements are anticipated due to the baghouse control on particulate emissions. The indicator level is consistent with proper operation of the baghouse for particulate matter control. Emissions testing for PM, PM_{10}, and $PM_{2.5}$ in 2020 indicates that operation of EU 43 with the baghouse control results in particulate emissions of 0.043 lb/hr, well below the emission limit of 4.17 lb/hr PM/PM_{10} with

[3] Opacity limit from Table 4 to Subpart DDDDD of Part 63 – Operating Limits for Boilers and Process Heaters, Item 4.a.
[4] Opacity limit from Table 4 to Subpart DDDDD of Part 63 – Operating Limits for Boilers and Process Heaters, Item 4.a.

typical operations between 0%-7% opacity.

Therefore, the use of 10% opacity on a daily block average is a good indicator of compliance with the PM/PM_{10} limit of 4.17 lb/hr. If the baghouse is operating properly, there will not be particulate emissions above 4.17 pounds/hour or opacity greater than 20% (based on a one-hour average) from the exhaust stack except potentially during start up, shut down, or upset conditions. The facility's Title V Permit to Operate requires reporting of excursions to the North Dakota Department of Environmental Quality on a semi-annual basis.

Cargill, Inc., Cargill Oilseeds Processing
Title V Permit to Operate No. AOP-28376 v6.0
(Previously T5-G81005)
Statement of Basis
(1/30/2025)

Facility Background: The Cargill, Inc. Oil Seeds Plant is an oilseeds crushing plant that produces highly refined vegetable oils from sunflower seeds, canola, flax and other soil seeds. Meal is produced and shipped as a by-product. Steam for selected process units is supplied by the Foster Wheeler (FW) hull-fired boiler (50.3×10^6 Btu/hr), which has the capability of being fired by natural gas and/or hulls, and by the International Boiler Works (IBW) natural gas and/or landfill gas (LFG)-fired boiler of similar capacity. A deodorizer boiler (9.9×10^6 Btu/hr) is fired on natural gas and/or LFG. The LFG comes from the Fargo Sanitary Landfill. With the exception of the three boilers, two gas-fired seed dryers, hexane extraction vent and an emergency fire pump diesel engine, all other emission source units emit low quantities of particulate matter.

Chronology of significant events (not all-inclusive):

December 6, 1979 - Cargill, Inc., Riverside Sunflower Seed Processing Plant received an interim variance for Phase I (storage facility) construction of the facility.

December 9, 1980 – Cargill Inc. received an amended interim variance to include testing and modeling for the Riverside facility.

June 11, 1981 - Cargill, Inc. received the initial air pollution control Permit to Construct (PTC) and Operate No. G81005 for the Riverside Sunflower Seed Processing Plant, which included only the FW hull-fired boiler (EU 43) as the steam supplier at the time.

November 3, 1981 – Cargill, Inc. was provided an amended air pollution control Permit to Construct and Operate to include additional emission units.

May 30, 1984 - The Permit to Operate (PTO) was renewed at approximately three-year intervals (1987, 1990, 1993, 1996) thereafter and revised several times prior to the initial Title V PTO issuance (May 1, 1987; April 3, 1989; August 7, 1991; February 4, 1993; April 8, 1994; May 17, 1995). The facility began to be referred to as a multi-seed processing plant (removing "sunflower" from the name and throughout the permit) and then oil seed plant with the introduction of canola and soybean processing.

September 11, 1992 - An interim variance was provided to Cargill, Inc. for the installation of the IBW boiler.

October 27, 1992 – A PTC was issued for the IBW boiler; the PTO was revised to add the boiler in February 1993.

January 14, 1998 - The initial Title V permit No. T5-G81005 was issued.

September 11, 1998 – Title V Revision No. 1 (minor mod.) was issued to remove and replace the sunflower seed dehulling system and seed cleaning system.

February 11, 2000 - Cargill Inc. was issued Title V Revision No. 2 (admin. amended) to correct monitoring for EU 25A and 25B.

July 12, 2001 - Title V Revision No. 3 (minor mod.) was issued for to update emission units and add an emergency generator.

January 7, 2002 - PTC02003 was issued for the use of landfill gas in the IBW boiler.

August 12, 2004 - Title V Renewal No. 1 (AOP-28376 v2.0) was issued and incorporated PTC02003.

August 21, 2007 - Revision No. 1 to Renewal No. 1 (AOP-28376 v2.1; minor mod.) was issued to resume canola seed processing [thereby increasing emissions from the extraction system final vent (EU 46)] and use a previously idled recirculating packed bed scrubber for control of sulfur compounds associated with canola processing.

February 20, 2009 - PTC09006 (ACP-17206 v1.0) was issued to increase LFG usage and include LFG usage in a new deodorizer boiler (EU 54). An approval letter from the Department dated March 31, 2009, revised EU 54 from 6.72 to 9.9 x 10^6 Btu/hr.

September 21, 2009 - Title V Renewal No. 2 (AOP-28376 v3.0) was issued and incorporated ACP-17206 v1.0.

July 20, 2011 - Revision No. 1 to Renewal No. 2 (AOP-28376 v3.1; minor mod.) was issued to address NSPS requirements and revise the CAM Plan for the hull-fired FW boiler (EU 43).

January 4, 2012 - PTC11084 (ACP-17381 v1.0) was issued to replace certain process units planned for the 2013 Rebuild Project and replaced the FW boiler (EU 43) electrostatic precipitator with a baghouse.

April 2, 2012 - Title V Revision No. 2 to Renewal No. 2 (AOP-28376 v3.2; sig. mod.) was issued to revise the CAM Plan by removing emission units considered to be inherent process equipment.

August 19, 2013 - PTC13050 (ACP-17546 v1.0) was issued to revise the FW boiler (EU 43) particulate limits consistent with the boiler MACT rule (40 CFR 63, Subpart DDDDD).

November 12, 2014 - Title V Renewal No. 3 (AOP-28376 v3.2) was issued and incorporated ACP-17381 v1.0 and ACP-17546 v1.0.

September 27, 2018 - PTC18020 (ACP-18102 v1.0) was issued to increase production capacity, remove bottlenecks in the refinery portion of the facility and replace the cooling tower (not previously addressed in the operating permit; EU 64/EP 64 in the PTC).

August 6, 2019 - Title V Renewal No. 4 (AOP-28376 v5.0) was issued and incorporated a majority of ACP-18102 v1.0 as well as insignificant conveying equipment (EU 65).

August 18, 2020 - PTC18020, Amendment No. 1 (ACP-17876 v1.0) was issued to extend the remaining activities associated with ACP-18102 v1.0.

December 30, 2024 - ACP-18261 v1.0 was issued to update and correct several emission limits associated with several insignificant and minor emission units at the facility.

Current Action: On February 8, 2024, the Department received a timely application through CERIS-ND from Cargill, Inc. for renewal of the Cargill Oilseeds Processing Title V Permit No. AOP-28376. The draft, renewal permit incorporates ACP-18261 v1.0, remaining activities permitted by ACP-18102 v1.0 and ACP-17876 v1.0, along with administrative updates and corrections.

The Department proposes to issue Title V Permit to Operate No. AOP-28376 v6.0 after the required 30-day public comment period and subsequent 45-day EPA review period of the draft permit. This statement of basis summarizes the relevant information considered during the issuance of the Title V permit. The legal basis for each permit condition is stated in the draft permit under the heading "Applicable Requirement."

Applicable Programs/As-Needed Topics:

1. **Title V.** The facility requires a Title V Permit to Operate because potential annual NO_x and VOC emissions exceed the 100 tons per year (tpy) major source threshold. The facility is considered a major source of Hazardous Air Pollutant (HAP) emissions because individual HAP emissions are above 10 tpy for hexane. A potential to emit table is provided on the last page of this document.

2. **New Source Performance Standards (NSPS).** The following NDAC 33.1-15-12-02 and 40 CFR 60 subparts apply to the facility.

   Subpart A, General Provisions, applies to all source units to which another NSPS subpart applies.

   Subpart Dc, Standards of Performance for Small Industrial - Commercial - Institutional Steam Generating Units [International Boiler Works boiler (EU 44)]. The boiler is a steam generating unit with a capacity between 10 and 100 MMBtu/hr (actual 50 MMBtu/hr) constructed after June 9, 1989 (actual 1992).

3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No NDAC 33.1-15-13 and 40 CFR 61 subparts apply to the facility, with the possible exception of NDAC 33.1-15-13-02 (40 CFR 61) Subpart M (National Emission Standard for Asbestos), which may apply during facility modifications involving asbestos.

4. **NESHAP/Maximum Achievable Control Technology (MACT) Standards.** The following NDAC 33.1-15-22-03 and 40 CFR 63 subpart applies to the facility, which is a major source of HAP emissions.

Subpart A, General Provisions, applies to all source units to which another MACT subpart applies.

Subpart GGGG, National Emission Standards for Hazardous Air Pollutants for Solvent Extraction for Vegetable Oil Production (facility-wide). The facility operates a vegetable oil production process and is a major source of HAP emissions.

Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (EU 53).

Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters (EU 43, EU 44 and EU 54).

Related NESHAP/MACT Subparts That Are Not Applicable:

Subpart Q (Industrial Process Cooling Towers) requirements are considered but do not apply to this facility as long as it does not use chromium-based water treatment chemicals in an industrial process cooling tower (EU 64).

5. **Acid Rain.** NDAC 33.1-15-21 (40 CFR 72, 73, 75 and 76) does not apply since the facility is not an existing electric utility steam generating plant rated at greater than 25 MWe.

6. **Prevention of Significant Deterioration (PSD).** The facility is a major source under NDAC 33.1-15-15 (40 CFR 52) because it has the potential to emit 250 tons or more per year of a regulated pollutant (VOC hexane) during normal operations. However, there are no changes contained in this draft permit that increase potential emissions by a PSD-significant amount. Therefore, this draft permit is not subject to PSD review.

7. **Best Available Control Technology (BACT).** Although this facility is a major source under PSD, this draft permit does not contain any changes that increase the potential emissions by a PSD-significant amount. Therefore, a BACT review is not required.

8. **Gap Filling.** Although the permit does contain gap filling for testing, monitoring or recordkeeping not otherwise required by rule, this draft permit does not contain significant revisions to previously permitted gap filling. The gap filling conditions are generally identified by the applicable requirement NDAC 33.1-15-14-06.5.a(3)(a).

9. **Streamlining Decisions.** Not applicable because no streamlining was involved with this draft permit.

10. **Compliance Assurance Monitoring (CAM).** CAM is applicable to the Foster Wheeler boiler (EU 43) because it uses a control device to achieve compliance and uncontrolled potential to emit particulate matter emissions are estimated to be ≥100 tpy.

11. **Permit Shield.** Permit shield applies because the draft permit contains a permit shield. There were no changes to the permit shield.

12. **New Conditions/Limits.** This draft permit includes new limits and conditions associated with the incorporation of ACP-18261 v1.0, remaining activities permitted by ACP-18102 v1.0 and ACP-17876 v1.0. Specific modifications are identified in the "Permit Changes by Section" below.

13. **40 CFR 98 - Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds or in certain supplier thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98, nor Clean Air Act Section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their Part 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section:

Note: Administrative changes were made to some sections of the permit to update to the current North Dakota (ND) format and to correct errors. In addition, the Permit to Operate number and references to Permit to Construct numbers have been updated to accommodate the Air Quality database (CERIS-ND). These changes may not be specifically addressed below.

Cover: Permit number, expiration date and renewal were updated.

Table of Contents: Page numbers were updated as necessary.

Permit Shield: No change.

1. **Emission Unit Identification**: A heading was added to the table, emission units descriptions were updated for clarity, EU 53 (diesel engine-driven emergency fire pump) was removed and the following units were added (EU 66, 67 and 68; two diesel engine-driven emergency fire pumps and a natural gas driven emergency generator). EU 25, 26, 27 and 38 were shown to be "insignificant" in accordance with Title V regulations, so they were marked with Footnote B. EU 64 cooling tower systems was clarified by identifying each loop of the system (designated as EU 64a, 64b and 64c). The table footnotes were administratively updated.

2. **Applicable Standards, Restrictions and Miscellaneous Conditions**: This section was updated to the current ND standard. EU 68 fuel restriction was added to Condition 2.A. NSPS Subpart IIII and JJJJ were added to Condition 2.D for EU 66, 67 and 68. NESHAP/MACT Subpart ZZZZ was updated to remove EU 53 and add EU 66, 67 and 68.

3. **Emission Unit Limits**: The emission limits were updated per ACP-18261 v1.0. EU 53 was removed and EU 66, 67 and 68 were added to the Table 3.1. The fugitive emissions condition (3.B) was added.

4. **Monitoring Requirements and Conditions**: Monitoring requirements and conditions were updated to the current ND standard and added for EU 66, 67 and 68. Since EU 25 through 27 and 38 are considered "insignificant" and not subject to an applicable federal regulation, monitoring was removed (recordkeeping was removed as well). EU 53 was removed from this section. Footnote A was added for clarity on monitoring for EU 43.

5. **Recordkeeping Requirements**: EU 25 through 27, 38 and 53 were removed and EU 66, 67 and 68 were added to the Table 5.1. Recordkeeping requirements and conditions were updated to the current ND standard.

6. **Reporting**: Reporting requirements and conditions were updated to the current ND standard.

7. **Facility Wide Operating Conditions**: Condition 7.E was added to reflect the current ND facility wide operating conditions. The Noncompliance Due to an Emergency condition (7.G) was removed per EPA's Affirmative Defense Provision Rule effective 8/21/23.

8. **General Conditions**: Conditions 8.E was revised to reflect the updated NDDEQ mailing address and current ND general conditions.

9. **State Enforceable Only Conditions (not Federally enforceable)**: No change.

Attachment A - Compliance Assurance Monitoring (CAM) Plan for EU 43: The CAM Plan was administratively updated.

Comments/Recommendations: It is recommended that the Title V Permit to Operate No. AOP-28376 v6.0 be processed and considered for issuance following a 30-day public comment period and a subsequent 45-day EPA review period.

Facility-Wide Potential Emissions [A]

Pollutant	Tons Per Year Without Fugitives	Tons Per Year With Fugitives
PM	59.2	340.3
PM_{10}	53.6	123.4
$PM_{2.5}$	48.9	61.4
SO_2	22.5	22.5
NO_x	173.1	175.8
CO	51.0	53.2
VOC	410.9	411.1
Total HAPs	394.1	394.1
Individual HAP (Hexane)	390.2	390.2

[A] Based upon Title V renewal application information submitted through CERIS-ND on 2/8/2024 and updated information provided on 3/7/25. Emission unit and emission point specific potential emissions are provided in the renewal application.