

DRAFT, 2020

Source ID No. 1810018

Corena Pendry
Area Environmental Manager
ADM 8000 W 110th St., Suite 220
Overland Park, KS 66210

Re: Class I Air Emission Source Operating Permit Renewal – Northern Sun Co., A Division of Archer Daniels Midland (ADM) Company

Dear Ms. Pendry:

Enclosed is the Class I Operating Permit Renewal for Northern Sun Co., A division of ADM located in Goodland, Kansas. The annual certification must be submitted to the Kansas Department of Health and Environment (KDHE) on or before **January 31st of each year the permit is in effect**. The annual certification form is available in KEIMS (<https://www.kdheks.gov/bar/keims-BOA.html>). For the semi-annual reports, please refer to the Section XII. Testing, Monitoring, Recordkeeping and Reporting of the permit. Submittal of the annual certification does not take the place of the semi-annual report.

For the transition period between the previous permit and the enclosed renewal permit, please comply with the following interim reporting requirements. The certification due on January 31, 2021 should cite both the June 23, 2015 permit and the enclosed permit. The semi-annual report due on January 31, 2021 shall contain two separate reports: one covering the June 23, 2015 permit requirements from July 1 to **DRAFT – 1** day, and one covering the enclosed permit requirements from **DRAFT** to December 31, 2020. Subsequent semi-annual reports will follow the reporting requirements under **Section XIV. General Provisions: Subsection G. Compliance Certification** listed within the enclosed permit. For questions on semi-annual reporting requirements for this facility please contact Air Compliance and Enforcement staff at 785-296-1542 or 785-296-0243.

Please review the enclosed operating permit carefully since it obligates Northern Sun Co., a division of ADM Company to certain requirements.

As provided for in K.S.A. 65-3008b(e), an owner or operator may request a hearing within 15 days after affirmations, modification or reversal of a permit decision pursuant to subsection (b) of K.S.A. 65-3008a. In the Request for Hearing, the owner or operator shall specify the provision of this act or rule and regulation allegedly violated, the facts constituting the alleged violation and secretary's intended action. Such request must be submitted to: Director, Office of Administrative Hearings, 1020 S. Kansas Avenue, Topeka, Kansas 66612-1327. Failure to submit a timely request shall result in a waiver of the right to hearing.

The enclosed Class I Operating Permit does not relieve the permittee of the responsibility to obtain an air construction permit for future modifications that increase the facility's potential-to-emit of any regulated air pollutants as specified in K.A.R. 28-19-300, or any other modifications that may trigger other applicable air emission requirements.

Please include the source ID number listed above in all communications with KDHE in reference to this permitted facility. If you have any questions about the enclosed permit, or need any additional information, please contact me at (785) 291-3271.

Sincerely,

Rumela Bhadra, Ph.D.
Engineering Associate
Air Permitting Section

Enclosure
RB:
c: NWDO
OP100330 v5.0

AIR EMISSION SOURCE CLASS I OPERATING PERMIT

Source ID No.: 1810018

Initial Date: May 28, 2004 (Modified December 29, 2004, February 2, 2007, December 31, 2008)

Renewal Date: August 26, 2009
June 23, 2015
DRAFT, 2020

Revision Date: December 11, 2015 (Administrative Amendment)

Expiration Date: **DRAFT, 2020**

Source Name: Northern Sun Co., A Division of Archer Daniels Midland Company

SIC Code: 2076, Vegetable Oilseed Processing, except Corn, Cottonseed, and Soybeans

NAICS Code: 311224, Soybean and Other Oilseed Processing

Source Location: 6425 County Road 14
Goodland, KS 67735

Mailing Address: 6425 County Road 14
Goodland, KS 67735

Contact Person: Corena Pendry
Area Environmental Manager
Tel: (913) 266-5047
Corena.pendry@adm.com

I. Authority

This permit, developed in accordance with the provisions of K.A.R. 28-19-500 et seq., "Operating Permit," meets the requirements of K.A.R. 28-19-510 et seq., Class I Operating Permits and Title V of the federal Clean Air Act.

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Attachment A: List of Acronyms and Symbols

Attachment B: Site Diagram

Attachment C: CAM Plan

II. Permit Intent

The purpose of this Class I Air Operating Permit is to identify the emission sources and types of regulated air pollutants emitted from the facility; the emission limitations, standards and requirements applicable to each source; and the monitoring, recordkeeping and reporting requirements applicable to each source as of the effective date of this permit. At the time of permit issuance, a Class I Air Emission Source Operating Permit was required because the facility had the potential-to-emit (PTE) over 100 tons of particulate matter with an aerodynamic diameter less than or equal to 10 microns (PM₁₀) and Volatile Organic Compounds (VOC). Also, the PTE is over the major source thresholds for combined Hazardous Air Pollutant (HAPs) and single HAP – Hexane.

Separately, the facility has an overall facility wide VOC and HAP limit of <249 tons per year for 12-month rolling average to remain as a *Prevention of Significant Determination* (PSD, 40 CFR Part 52.21) minor stationary source.

III. Facility Description

Northern Sun, a Division of the Archer Daniel Midland Company, operates an oilseed processing plant in Goodland, Kansas, that produces crude vegetable oil and meal from oilseeds. Insignificant activities at the plant include: Fuel tanks, one (1) 572 gallon #2 fuel oil tank one (1) 250 gallon #2 fuel oil tank, one (1) 494 gallon #2 fuel oil tank, and one (1) 309 gallon gasoline tank.

During this permit renewal, per Construction Approval issued on July 16, 2018 (C-14373) the existing flat storage EU-3 was approved to store up to 1.8 million U.S. bushels of wheat and the rest will be oilseeds. The total capacity of this storage is 3.6 million U.S. bushels. However, new associated grain handling systems was installed per this approval to assist wheat grain handling. These systems are now included in this renewal as an Insignificant Activity (IA) since most of them are portable in nature and designated as IA-07, IA-08, and IA-09.

IV. Emission Source Information

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
TK-01	Commercial Grade Hexane, 35,000 gallon	None	CE-8	Mineral Oil Scrubber	K.A.R. 28-19-650(a)(3), 40 CFR Part 63, Subpart A, GGGG Construction Permit dated 12/31/08 Construction Permit dated 12/31/08
IA-01	Fuel tank (vegetable oil or fuel oil #2), 250,000 gallon	None	None	N.A.	K.A.R. 28-19-650(a)(2),
IA-06	Holding tank , 3760 gallon	None	None	N.A.	K.A.R. 28-19-650(a)(2)

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-1	Truck / Rail Receiving	EP-1	CE-1	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64, Construction permit dated 5/16/95 Construction Permit dated 7/2/09
EU-2	Elevator / Storage	EP-2,3,4	CE-2,3,4	Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), Construction permit dated 5/16/95 Construction Permit dated 7/2/09
EU-3	Flat storage	EP-5	CE-5	Fabric Filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction Permit dated 7/2/09 Construction Approval dated 7/16/18
EU-4	Rotex Screen	EP-12	CE-12	Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction Permit dated 7/2/09
EU-5	Cracking / Flaking	EP-6	CE-6	Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), Construction permit dated 5/16/95 Construction Permit dated 7/2/09

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-6	Conditioning / Expelling / Material Transfer	EP-7	CE-7	Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), Construction permit dated 5/16/95 Construction Permit dated 7/2/09
EU-7	Extractor	EP-8	CE-8	Mineral Oil Scrubber	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 63, Subpart A, GGGG Construction Permit dated 12/31/08 Construction Permit dated 12/31/08 Construction Permit dated 10/5/16
EU-8	Desolventizer / Toaster / Dryer / Cooler	EP-8,9,10	CE-8,9,10	CE-8 Mineral Oil Scrubber and CE-9,10 Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 63, Subpart A, GGGG 40 CFR Part 64 Construction permit dated 5/16/95 Construction Permit dated 12/31/08 Construction Permit dated 12/31/08 Construction Permit dated 7/2/09
EU-9	Meal Sifting / Grinding	EP-11	CE-11	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), Construction Permit dated 7/2/09

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-10	Pellet Mill / Cooler	EP-12	CE-16	Cyclone	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), Construction permit dated 5/16/95 Construction Permit dated 7/2/09
EU-11	Meal storage	EP-13,14	CE-13,14	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction Permit dated 7/2/09
EU-12	Pellet Storage	EP-15	None	N.A.	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3) Construction Permit dated 7/2/09
EU-13	Transfer to Loadout	EP-16	CE-15	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction Permit dated 7/2/09
EU-14	Truck / Rail Loadout	EP-16	CE-15	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction permit dated 5/16/95 Construction Permit dated 7/2/09
EU-15	Flowability Agent Storage / Transfer	EP-11	CE-11	Fabric filter	K.A.R. 28-19-20, K.A.R. 28-19-650(a)(3), 40 CFR Part 64 Construction Permit dated 7/2/09

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
EU-16	Boiler # 1, Nebraska Boiler, Model NSE-58, with a maximum rated heat input of 75 MMBtu/hr	EP-17	None	N.A.	K.A.R. 28-19-31(a), K.A.R. 28-19-31(b)(2), 40 CFR Part 60, Subpart A, Dc; 40 CFR Part 63, Subpart A, DDDDD Construction permit dated 11/20/01 Construction Permit dated 12/31/08 Construction Permit dated 7/2/09
EU-17	Boiler # 2, Kewanee Boiler, Model H3S600KG, with a maximum rated heat input of 25.106 MMBtu/hr	EP-18	None	N.A.	K.A.R. 28-19-31(a), K.A.R. 28-19-31(b)(2), 40 CFR Part 60, Subpart A, Dc; 40 CFR Part 63, Subpart A, DDDDD Construction permit dated 4/14/92 Construction Permit dated 12/31/08 Construction Permit dated 7/2/09
EU-18	Diesel Fire Pump, 340 hp	EP-19	None	N.A.	K.A.R. 28-19-650(a)(3) 40 CFR Part 63 Subpart A, ZZZZ Construction Permit dated 7/2/09
EU-19	Diesel Standby Emergency Generator, 250 hp	EP-20	None	N.A.	K.A.R. 28-19-650(a)(3) 40 CFR Part 63 Subpart A, ZZZZ Construction Permit dated 7/2/09

Emission Source ID No.	Emissions Source Description	Stack/Vent ID	Control Equipment ID	Control Equipment Description	Specific Applicable Regulations
FS-Hexane Bubble	Hexane emissions from extraction process	None.	None	N.A	K.A.R. 28-19-650(a)(3) Construction Permit dated 12/31/08 Construction Permit dated 12/31/08
IA-07	Portable drive-over truck unloading station. Capacity 10,000 bu/hr	None	None	N.A.	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Approval dated 07/16/18
IA-08	One (1) portable Altoona belt conveyor. Capacity 10,000 bu/hr	None	None	N.A.	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Approval dated 07/16/18
IA-09	One (1) new tractor mounted auger for loading grain. Capacity 10,000 bu/hr	None	None	N.A.	K.A.R. 28-19-20 K.A.R. 28-19-650(a)(3) Construction Approval dated 07/16/18

V. Summary of Applicable Requirements

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40 CFR Part 68, Chemical Accident Prevention Provisions..... **Error! Bookmark not defined.**
40 CFR Part 82, Protection of Stratospheric Ozone **Error! Bookmark not defined.**

VI. Applicable Requirements

A. The following emission sources are subject to the requirements listed below:

IA-01 Fuel tank (vegetable oil or fuel oil #2), 250,000 gallon
IA-06 Holding tank, 3760 gallon

1. Limitation or Standard

Opacity shall not exceed 40 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-650(a)(2)]

a. Monitoring, Recordkeeping and Reporting

As described in **Section IX. Opacity Limitations and Monitoring** of this permit, emissions from evaporative VOC sources do not require routine periodic monitoring.

B. The following emission sources are subject to the requirements listed below:

EU-1 / EP-1 / CE-1	Truck / Rail Receiving
EU-2 / EP-2, 3, 4 / CE-2, 3, 4	Elevator / Storage
EU-3 / EP-5 / CE-5	Flat storage
EU-4 / EP-12 / CE-12	Rotex Screen
EU-11 / EP-13, 14 / CE-13,14	Meal storage
EU-13 / EP-16 / CE-15	Transfer to Loadout
EU-14 / EP-16 / CE-15	Truck / Rail Loadout
EU-15 / EP-11 / CE-11	Flowability Agent Storage / Transfer

1. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight \leq 30 tons/hr
 $E = 4.1(P^{0.67})$

for: Process weight $>$ 30 tons/hr
 $E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

b. Recordkeeping and Reporting

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

2. Limitation or Standard

The control equipment shall be continuously operated while operating the emission unit. [K.A.R. 28-19-501(d)(1)].

a. Monitoring

A written air pollution control equipment maintenance plan shall be developed within 30 days of permit issuance, implemented and maintained. [K.A.R. 28-19-501(d)(2)]

b. Recordkeeping and Reporting

The owner or operator shall maintain a log showing the date of all routine or other maintenance or repairs of the control equipment, the action taken on such date, and any corrective action or preventative measures taken. [K.A.R. 28-19-501(d)(3)]

C. The following emission source is subject to the requirement listed below:

EU-5 / EP-6 / CE-6	Cracking / Flaking
EU-8 / EP-9, 10 / CE-9, 10	Desolventizer / Toaster / Dryer / Cooler
EU-9 / EP-11 / CE-11	Meal Sifting / Grinding
EU-10 / EP-12 / CE-16	Pellet Mill / Cooler

1. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight \leq 30 tons/hr
 $E = 4.1(P^{0.67})$

for: Process weight $>$ 30 tons/hr
 $E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

Compliance Assurance Monitoring

Monitoring shall be performed in compliance with 40 CFR Part 64, Compliance Assurance Monitoring (CAM) found in **CAM Plan**, Attachment C.

Alternate monitoring may be established through the development of a revised CAM Plan. Once approved in writing by KDHE, the owner/operator will comply with the new requirements on such date as agreed upon with the KDHE. The newly approved requirements will supersede the monitoring established above. The new monitoring will be incorporated into the permit upon renewal or significant modification to the permit, whichever comes first. See **CAM Plan**, Attachment C.

b. Reporting

Records shall be maintained in accordance with the requirements of 40 CFR 64 and the CAM Plan in Attachment C. The CAM Plan and any revisions of such plan approved by the KDHE shall be maintained onsite in a form suitable for inspection.

D. The following emission source is subject to the requirement listed below:

EU-12 / EP-15	Pellet Storage
EU-07/EP-08/CE-08	Extractor with Mineral Oil Scrubber*
IA-07**	One (1) portable drive-over truck unloading station, capacity 10,000 bu/hr
IA-08**	One (1) portable Altoona belt conveyor, capacity 10,000 bu/hr
IA-09**	One (1) tractor mounted auger, capacity 10,000 bu/hr

*Per Construction Permit dated October 5, 2016

**Per Construction Approval dated July 16, 2018.

1. Limitation or Standard

Particulate matter emissions during any one hour are limited according to the following equations: [K.A.R. 28-19-20]

for: Process weight \leq 30 tons/hr
 $E = 4.1(P^{0.67})$

for: Process weight $>$ 30 tons/hr
 $E = 55(P^{0.11}) - 40$

Where: E = the rate of emissions in lb/hr
P = the process weight in tons/hr

a. Monitoring

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

b. Recordkeeping and Reporting

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

E. The following emission source is subject to the requirement listed below:

EU-17 / EP-18	Boiler # 2, Kewanee
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1. Limitation or Standard

Particulate matter emissions are limited to the amount determined by the following equation:

$$A = \frac{1.026}{I^{0.233}}$$

Where:

A = the allowable emission rate in lb/10⁶ BTU
I = the total heat input in 10⁶ BTU/hr
[K.A.R. 28-19-31(a)]

a. Monitoring

Due to potentially very low or nonexistent emissions, no monitoring is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate (process changes, emission factor increases, fuel changes, etc.), the potential particulate matter emission rate must be recalculated and evaluated against the rule limitation.

b. Recordkeeping and Reporting

No recordkeeping is required at the time of permit issuance. If, however, any factors change that would affect the potential particulate matter emission rate, records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

2. Limitation or Standard

The owner or operator shall comply with the applicable section of 40 CFR Part 60 Subpart A, General Provisions and, Subpart Dc, *Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. **These requirements are summarized in this permit.** If a conflict exists between the federal rule and what is summarized in **Section VI.E.** of this permit, the requirements of the federal rule shall take precedence.

Fuel burned in the steam generator is to be natural gas only [Construction Permit dated April 14, 1992]

a. Monitoring, Recordkeeping and Reporting

- i. The owner and operator of each affected facility shall maintain records of the occurrence and duration of startup, shutdown, or malfunction in the operation of an affected facility. [40 CFR 60.7(b)]
- ii. The owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each day. [40 CFR 60.48c (g)]
- iii. All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.[40 CFR 60.48c (i)]

F. The following emission sources are subject to the requirements listed below:

EU-16 / EP-17 Boiler # 1, 75 million Btu/hr, Nebraska

1. Limitation or Standard

Particulate matter emissions are limited to the amount determined by the following equation:

$$A = \frac{1.026}{I^{0.233}}$$

Where:

A = the allowable emission rate in lb/10⁶ BTU
I = the total heat input in 10⁶ BTU/hr
[K.A.R. 28-19-31(a)]

a. Monitoring

During periods of Natural Gas operations:

The owner or operator shall re-evaluate the particulate emission rate limitation when either the process changes or an emission factor changes.

During periods of Fuel Oil operations:

After the effective date of this permit, and within 180 days of this boiler being fired with distillate oil as a fuel source, a performance test shall be performed to determine particulate emissions. Testing shall follow the methods defined in 40 CFR 60.45c and 40 CFR 60.8 for particulate sampling.

During periods of Vegetable Oil operations:

Within 60 days after achieving the maximum production rate at which the boiler will operate, but not later than 180 days after initial startup while firing the vegetable oil, the owner/operator shall conduct a performance tests while firing the vegetable oil to demonstrate the accuracy of the emission factors used in estimating emissions.(Construction Permit dated November 20, 2001)

b. Recordkeeping and Reporting

During periods of Natural Gas operations:

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emissions rates.

During periods of Fuel Oil or Vegetable oil operations:

A record of performance testing and any subsequent particulate compliance testing on the boiler will be maintained and made available for inspection on request.

2. Limitation or Standard

During periods of Natural Gas operations:

Opacity shall not exceed 20 percent except as provided at K.A.R. 28-19-11. [K.A.R. 28-19-31(b)(2)]

During periods of Fuel Oil or Vegetable oil operations:

When using distillate oil / vegetable oil, opacity shall not exceed 20 percent except for one 6-minute period per hour of not more than 27 percent opacity. [40 CFR 60.43c(c)]

The opacity standard applies at all times except during periods of startup, shutdown, or malfunction. [40 CFR 60.43c(d)]

a. Monitoring

Periodic monitoring will be performed as provided in **Section IX. Opacity Limitations and Monitoring** of this permit.

b. Recordkeeping and Reporting

Records of periodic monitoring will be maintained as specified in **Section IX. Opacity Limitations and Monitoring** of this permit.

Records of periodic monitoring that would be subject to reporting shall be reported in accordance with **Section XIII. Reporting of Deviations from Permit Terms** of this permit.

3. Limitation or Standard

The owner or operator shall comply with the applicable section of 40 CFR Part 60, Subpart A, General Provision and, Subpart Dc, *Standard of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*. **These requirements are summarized in this permit.** If a conflict exists between the federal rule and what is summarized in **Section VI.F.** of this permit, the requirements of the federal rule shall take precedence.

The fuel to be combusted in the boiler is limited to natural gas, distillate oil or vegetable oil. [Construction Permit dated November 20, 2001]

The distillate oil and vegetable oil used shall not contain sulfur content greater than 0.05 weight percent sulfur. [Construction Permit dated November 20, 2001]

The combined consumption of distillate oil and vegetable oil is limited to 3,400,000 gallons during any consecutive 12 month period. [Construction Permit dated November 20, 2001]

a. Monitoring

- i. At all times, including periods of startup, shutdown, and malfunction owner or operator shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 60.11(d)]
- ii. In accordance with 40 CFR 60.42c (i), the distillate oil sulfur content limitation applies at all times, including periods of startup, shutdown, and malfunction. [K.A.R. 28-19-720 which adopted by reference 40 CFR 60.42c(d) and (i)]
- iii. To demonstrate that the sulfur content of the vegetable oil less than 0.05 percent by weight, the permittee shall perform the following:
 - (a) The initial performance test for the heat value and sulfur content consists of sampling and analyzing the vegetable oil to be fired in the boiler.

Thereafter, the vegetable oil in the fuel tank shall be sampled once per month for three consecutive months.

- iv. To demonstrate compliance with the distillate oil limits of 0.05 percent by weight or less sulfur, the owner or operator shall perform either of the following:
 - (a) Compliance with the fuel oil sulfur limits may be determined based on a certification from the fuel supplier which includes the name of the supplier and a statement from the oil supplier that the oil complies with the specifications for the distillate fuel oil, numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96 or 98, "Standard Specification for Fuel Oils" [40 CFR 60.42c(h)(1), 60.44c(h) and 60.48c(f)(1).
 - (b) The initial performance test may consist of sampling and analyzing the oil in the initial tank of the oil to be fired in the boiler in accordance with 40 CFR 60.44c(g). Thereafter, the oil in the fuel tank shall be sampled after each new shipment of oil is received, following the procedures set out in 40 CFR 60.46c(d)(2).

b. Recordkeeping and Reporting

The following records shall be kept as required by 40 CFR 60.48c(e):

- i. In accordance with 40 CFR 60.48c(g)(2), the owner or operator shall record and maintain records of the amount of natural gas, distillate oil, and vegetable oil combusted in the boiler during each month. Pursuant to authority in 40 CFR 60.13(i) the records of the amounts of fuel burned can be maintained in the form of monthly fuel bills or meter readings, or other records that adequately document fuel usage. [EPA letter on June 13, 1997]
- ii. In accordance with 40 CFR 60.48c(e)(2), if the distillate oil sulfur content ever exceeds 0.05 percent by weight, the recordkeeping frequency shall immediately revert to daily and the source shall ensure that the 30-day rolling average sulfur content will not exceed 0.05 percent by weight.
- iii. In accordance with 40 CFR 60.48c(e)(11), records of distillate oil supplier certification shall be kept if distillate oil supplier certification is used to demonstrate compliance.
- iv. In accordance with 40 CFR 60.7(b), records consisting of the occurrence and duration of any start-up, shutdown or malfunction in the operation of the boiler are to be maintained.
- v. In accordance with 40 CFR 60.48c(i), all of the required records shall be maintained at the facility by the owner or operator of the facility for a period of two years following the date of such record.
- vi. The results of the vegetable oil fuel sampling shall be reported to KDHE within 30 days of the sample being taken for analysis.

- vii. KDHE has determined that the boiler is eligible for reduced reporting requirements. The source shall submit quarterly reports when fuel oil or vegetable oil is combusted during the quarter. If fuel oil or vegetable oil is not combusted during the calendar year, that information will be stated in an annual report.
- viii. The report shall contain the following information:
 - (a) Calendar dates covered in the reporting period;
 - (b) If the vegetable oil or distillate fuel oil sulfur content ever exceeds 0.05 percent, each 30-day average sulfur content, in weight percent, calculated using methods in 40 CFR 60.46c(d)(2) for the reporting period, reasons for any noncompliance with the emission standards, and a description of corrective actions taken;
 - (c) The fuel supplier certifications; and
 - (d) Certified statements that the records of fuel supplier certifications submitted represent all of the fuel oil combusted during the reporting period.
- ix. Notify KDHE of any anticipated switches in fuel use. Written approval from KDHE is required prior to switching to a fuel other than natural gas, distillate oil or vegetable oil.

G. The following emission sources are subject to the requirements listed below:

EU-1 / EP-1 / CE-1	Truck / Rail Receiving
EU-14 / EP-16 / CE-15	Truck / Rail Loadout

1. Limitation or Standard

The unloading and loading of trucks shall be conducted only when the entry and exit doors of such areas are closed to create a totally enclosed environment. [Construction Permit dated May 16, 1995]

The receiving of oilseed shall be conducted in a manner such that the level of seed remains below the inlets of the aspiration system located within the receiving pits. [Construction Permit dated May 16, 1995]

a. Monitoring, Recordkeeping and Reporting

Interlock systems installed on truck receiving and truck meal loaded ensure that entry and exit doors are closed during seed unloading and meal loadout. A sign shall be posted on the rail/truck receiving indicating doors must be closed during seed unloading.

H. The following emission sources are subject to the requirements listed below:

EU-6 / EP-7 / CE-7	Conditioning/Expelling/Material Transfer
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1. Limitation or Standard

The amount of oilseeds processed shall be limited to 507,150 tons (460000 metric tons) per year in any consecutive twelve month rolling period. (Conversion factor for Metric tons to short tons is: 1 Metric Ton = 1.1025 Short Tons)[Construction Permit dated December 31, 2008]

a. Monitoring, Recordkeeping, and Reporting

Records of the amount of seed processed daily as well as monthly shall be maintained for a minimum of two (2) years from the date of record and shall be maintained in a format suitable for inspection.

I. The following emission sources are subject to the requirements listed below:

EU-7 / EP-8 / CE-8	Extractor
EU-8 / EP-8, 9, 10 / CE-8, 9, 10	Desolventizer / Toaster / Dryer / Cooler
TK-01	Commercial Grade Hexane, 35,000 gallon
FS-Hexane	VOC and HAP (Hexane) emissions from extraction process

1. Limitation or Standard

The owner or operator shall comply with the applicable section of 40 CFR Part 63, Subpart A, General Provisions, and Subpart GGGG, *National Emission Standards for Hazardous Air Pollutants: Solvent Extraction for Vegetable Oil Production*. **These requirements are summarized in this permit.**

If a conflict exists between the federal rule and what is summarized in **Section VI.I.** of this permit, the requirements of the federal rule shall take precedence.

a. Monitoring

When calculating the compliance ratio, the facility may consider the conditions and exclusions in paragraphs (b)(1) through (6) of 40 CFR 63.2840(b).

$$\text{Compliance Ratio} = \text{Actual HAP loss (gal)} / \text{Allowable HAP Loss (gal)}$$

As a function of total solvent loss the Compliance Ratio can be expressed as:

$$\text{Compliance Ratio} = \frac{f * \text{Actual Solvent Loss}}{0.64 * \sum [(Crush_i) * (SLF_i)]}$$

Where:

f = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in 40 CFR 63.2854, dimensionless.

Actual Solvent Loss = Gallons of actual solvent loss during the previous 12 operating months, as determined in 40 CFR 63.2853.

0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.

Crush_i = Tons of each oilseed type “i” processed during the previous 12 operating months; and

SLF_i = The corresponding solvent loss factor (gal/ton) for oilseed “i” as listed in Table 1 of 40 CFR 63.2840

- i. If the compliance ratio is less than or equal to 1.00, the facility was in compliance with the HAP emission requirements for the previous operating month. [40 CFR 63.2840(c).]
- ii. **On or after September 15, 2020**, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.2840(g)]
- iii. On and after September 15, 2020, the owner or operator must meet the requirements in paragraphs 40 CFR 63.2840(h)(1) through (3) of the subpart GGGG, if you choose to operate the source under an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2). [40 CFR 63.2840(h)]
- iv. In accordance with 40 CFR 63.2850(a)(2), the facility shall develop and implement a plan for demonstrating compliance in accordance with 40 CFR 63.2851.
- v. In accordance with 40 CFR 63.6(e)(3)(i) and 63.2850(a)(3) the facility shall develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provision in 40 CFR 63.2852. Per 40 CFR 63.2852(a)(3) on and after September 15, 2020, SSM plan is not required.
- vi. The owner or operator shall comply with the general requirements in 40 CFR 63.2850(a) (1) through (6), as applicable, while submitting compliance reports for HAPs emission standards.
- vii. The facility shall prepare a plan for demonstrating compliance (as described in 40 CFR 63.2851) and a SSM plan (as described in 40 CFR 63.2852). Complete both plans before the compliance date for the facility and keep them on-site and readily available as long as source is operational.
- viii. *Existing sources¹ under normal operation:* The owner or operator must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section. [40 CFR 63.2850(b)]
- ix. *New Sources under normal operation:* Upon initial startup² of the new source,

¹ Existing and New sources are defined in Table 1 of 40 CFR 63.2833.

² The facility completed all the initial requirements per the associated construction permit.

the owner or operator must meet all of the requirements listed in 40 CFR 63.2850(a) and Table 1 in the subsection, for sources under normal operation, and the schedules for demonstrating compliance for new sources under normal operation in Table 2 of the subsection. [40 CFR 63.2850(c)(1)]

b. Recordkeeping and Reporting

- i. For each operating month, the facility must calculate the compliance ratio which compares actual HAP loss to allowable HAP loss for the previous 12 operating months [(40 CFR 63.2840(a)(1) and 63.2840(a)(2)]. An operating month, as defined in 40 CFR 63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to 40 CFR 63.2850 (c)(2) or (d)(2) or a malfunction period subject to 40 CFR 63.2850(e)(2).
- ii. In accordance with 40 CFR 63.2850(a)(5) the facility shall submit the reports in paragraphs (i) through (iii) of this section:
 - (a) Annual compliance certifications in accordance with 40 CFR 63.2861(a).
 - (b) Periodic SSM reports in accordance with 40 CFR 63.2861(c)
 - (c) Immediate SSM reports in accordance with 40 CFR 63.2861(d)
 - (d) All the reports must be submitted electronically in the EPA CEDRI website (<https://cdx.epa.gov>) according to 40 CFR 63.2861(g)
- iii. **Deviation Notification Report:** The owner or operator shall submit a deviation report of each compliance determination it makes which the compliance ratio exceeds 1.00 as determined in 40 CFR 63.2840(c) or if you deviate from the work practice standard for an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs 40 CFR 63.2861(b)(1) through (7), if exceed the compliance ratio, and must include the items in paragraphs 40 CFR 63.2861(b)(1), (2), and (5) through (8), if deviate from the work practice standard. [40 CFR 63.2861(b)]
- iv. Per 40 CFR 63.2862 (a) the owner or operator must satisfy the recordkeeping requirements of section 40 CFR 63.2862, by the compliance date per the source (new or existing) specified in Table 1 of that section.
- v. Before September 15, 2020, prepare a plan for demonstrating compliance (as described in 40 CFR 63.2851) and a SSM plan (as described in 40 CFR 63.2852). In these two plans, describe the procedures the owner or operator will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the 40 CFR 63.2850(c)(2) or (d)(2) initial startup period or the 40 CFR 63.2850(e)(2) malfunction period. Complete both plans before the compliance date for the source and keep them on-site and readily available as long as the source is operational. On and after September 15, 2020, the requirement to prepare a SSM plan no longer applies, and the plan for demonstrating compliance must only describe the procedures the owner or operator develop according to the requirements of 40 CFR 63.2851. [40 CFR 63.2862(b)]

- vi. If the facility processes any listed oilseed, record the item in paragraph (c)(1) through (c)(3) of 40 CFR 63.2862(c).
- vii. In accordance with 40 CFR 63.2862(d), after the facility has processed listed oilseed for 12 operating months, and is not operating during an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or malfunction period as described in 40 CFR 63.2850(e)(2), record the item in paragraph (d)(1) through (d)(5) of this section by the end of the calendar month following each operating month.
- viii. In accordance with 40 CFR 63.2862(e), for each SSM event subject to an initial startup period as described in 40 CFR 63.2850(c)(2) or (d)(2), or a malfunction period as described in 40 CFR 63.2850(e)(2), record the items in paragraphs (e)(1) through (e)(3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred, as follows:
 - (a) A description and date of the SSM event, its duration, and reason it qualified as an initial startup or malfunction.
 - (b) An estimate of solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
 - (c) A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.
- ix. On and after September 15, 2020, for each initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2), record the items in paragraphs (f)(1) through (6) of this section by the end of the calendar month following each month in which the initial startup period occurred. [40 CFR 63.2862(f)]
- x. On and after September 15, 2020, keep the records of deviations specified in paragraphs (f)(1) through (4) of the section 40 CFR 63.2862, for each compliance determination the owner or operator make in which the compliance ratio exceeds 1.00 as determined under 40 CFR 63.2840(c) or if the owner or operator deviate from the work practice standard for an initial startup period subject to 40 CFR 63.2850(c)(2) or (d)(2). [40 CFR 63.2862 (g)]
- xi. Any records required to be maintained by this part that are submitted electronically via EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or EPA as part of an on-site compliance evaluation. [40 CFR 63.2862(h)]
- xii. The records must be in a form suitable and readily available for review in accordance with 40 CFR 63.10(b)(1). [40 CFR 63.2863]

2. Limitation or Standard

The owner or operator shall operate in a manner which limits solvent loss, as follows:

- a. Compliance with the final VOC solvent loss ratio (SLR) limit shall be determined in accordance with 40 CFR Part 63, Subpart GGGG, with the following exceptions:

- i. Provisions of 40 CFR Part 63, Subpart GGGG pertaining to HAP content shall not apply;
 - ii. Monitoring of solvent losses shall be conducted daily;
 - iii. Solvent losses and quantities of oilseed processed during start-up, shutdown periods shall not be excluded in determining solvent losses; and
 - iv. Records shall be kept that show total solvent losses, solvent losses during malfunction periods and adjusted solvent losses (i.e. total solvent losses minus malfunction losses).
- b. The VOC solvent loss ratio (SLR) shall be determined in accordance with 40 CFR Part 63, Subpart GGGG, with the following exceptions:
 - i. Provisions of 40 CFR Part 63, Subpart GGGG pertaining to HAP content shall not apply;
 - ii. Monitoring of solvent losses shall be conducted daily;
 - iii. Solvent losses and quantities of oilseed processed during start-up, shutdown periods shall not be excluded in determining solvent losses; and
 - iv. Records shall be kept that show total solvent losses, solvent losses during malfunction periods and adjusted solvent losses (i.e. total solvent losses minus malfunction losses), monthly and on a twelve month rolling basis.
- c. The provisions of 40 CFR Part 63 Subpart GGGG, pertaining to malfunction periods may be applied only when both of the conditions below are met:
 - i. The malfunction results in a total plant shutdown. For purposes of this permit a “total plant shutdown” shall mean a shutdown of the solvent extraction system; and;
 - ii. Cumulative solvent losses during malfunction periods at the plant shall not exceed 4,000 gallons in a 12-month rolling period.
- d. Monitoring
 - i. Monitoring of solvent losses shall be conducted daily.
 - ii. Except as otherwise set forth herein, the facility must include all solvent losses when determining compliance with its final VOC SLR limit. The total solvent loss corresponding to a malfunction period will be calculated as the difference in the solvent inventory, as defined in 40 C.F.R. 63.2862 (c) (1), for the day before the malfunction period began and the solvent inventory on the day the plant resumes normal operation. During a malfunction period, the facility shall comply with the Startup, Shutdown, and Malfunction (“SSM”) Plan as required under Subpart GGGG.
 - iii. **When processing Sunflower seeds only:**
 - (a) Periods of processing sunflower seeds only shall be determined on a

calendar month basis and shall include all operating months in which sunflower seeds are the only oilseed processed during that month.

- (b) When processing sunflower seeds only, the final VOC SLR shall be calculated as follows:

$$\text{Actual Solvent Loss/Sunflower Seed Crush} \leq 0.30 \text{ gal/ton}$$

Where:

Actual Solvent Loss = Gallons of solvent loss during previous consecutive 12 operating months when processing sunflower seeds only, excluding any allowable losses during malfunction periods.

Sunflower Seed Crush = Tons of sunflower seed crushed during the previous consecutive 12 operating months when processing sunflower seeds only.

[Construction Approval dated December 31, 2008]

iv. **When processing Multi-Oilseeds:**

- (a) Periods of processing multi-seeds shall be determined on a calendar month basis and shall include all operating months during which any oilseed other than sunflower seed is processed during any portion of the month. By definition this will be the default calculation to be used when oilseeds other than sunflower seeds are processed during any portion of a calendar month, whether switching to or from Sunflower Seeds only to another oilseed.

$$\text{Compliance Ratio} \leq 0.90$$

$$\text{Compliance Ratio} = \text{Actual Solvent Loss} / \sum [(Crush_i) * (SLF_i)]$$

Where:

Actual Solvent Loss = Gallons of actual solvent loss during previous consecutive 12 operating months when processing multi-oilseeds, excluding any allowable losses during malfunction periods.

Crush_i = Tons of each oilseed processed during the previous consecutive 12 operating months when processing multi-oilseeds; and

SLF_i = The corresponding solvent loss factor (gal/ton) for oilseed

“i” as listed in Table 1 of 40 C.F.R. 63.2840.

[Construction Approval dated December 31, 2008]

b. **Recordkeeping and Reporting**

- i. Recordkeeping of solvent losses shall be conducted daily. Records shall be kept for 5 years following the demonstration of compliance.

- ii. The facility shall maintain the records required by 40 C.F.R. Part 63, GGGG on solvent loss and quantity of oilseed processed; and
- iii. Maintain the records required by 40 C.F.R. Part 63, Subpart GGGG, for any malfunction period.
- iv. Records shall show total solvent losses, solvent losses during malfunction periods, and adjusted solvent losses (i.e. total solvent losses minus malfunction losses) monthly and on a 12-month rolling basis.
- v. The records shall be kept in the format of the following table:

Date	Total Crush (tons)		Total Solvent Loss (gallons)		Malfunction Period Solvent Loss (gallons)		Adjusted Solvent Loss ^a (gallons)		SLR ^b (gal/ton)
	Monthly	12-month rolling	Monthly	12-month rolling	Monthly	12-month rolling	Monthly	12-month rolling	12-month rolling
Month -Year									

a.-Adjusted Solvent Loss is equal to Total Solvent Loss minus Malfunction Period Solvent Loss.

b- Solvent Loss Ratio is equal to 12-month rolling Adjusted Solvent Loss divided by 12-Month Rolling Total Crush. Compliance determination is based on 12-Month Rolling SLR value compared to the Final VOC SLR Limit.

[Construction Approval dated December 31, 2008]

J. The following emission sources are subject to the requirements listed below:

EU-7 / EP-8 / CE-8	Extractor
EU-8 / EP-8, 9, 10 / CE- 8, 9, 10	Desolventizer / Toaster / Dryer / Cooler
TK-01	Commercial Grade Hexane, 35,000 gallon
FS-Hexane	VOC and HAP (Hexane) emissions from extraction process
EU-16 / EP-17	Boiler # 1, Nebraska
EU-17 / EP-18	Boiler # 2, Kewanee
EU-18 / EP-19	Diesel Fire Pump, 340 hp
EU-19 / EP-20	Diesel Standby Generator, 250 hp

1. Limitation or Standard

Total plant-wide VOC emissions shall be limited to ≤ 249 tons of VOC per any consecutive 12 month rolling period.

Monthly VOC emissions shall be calculated in the following manner:

a. Monitoring

The total combined emissions of VOC from the entire plant during each consecutive 12 month period shall be limited so that the following inequality is valid:

$$\{[0.2(A) + 5.5(B) + .8534(C) + .6275(D)] / 2000\} + E < 249 \text{ tons VOC}$$

Where:

- A = thousands of gallons of diesel fuel burned in Unit 16 boiler during the past 12 months
- B = million standard cubic feet of natural gas burned in Units 16 and 17 boilers during the past 12 months
- C = hours of operation of diesel Unit 18 fire pump during the past 12 months
- D = hours of operation of the standby generator Unit 19 during the past 12 months
- E = total tons solvent loss in the extraction process during the past 12 months

[Construction Permit dated December 31, 2008]

b. Recordkeeping and Reporting

Records of daily solvent usage, daily solvent loss, and daily total product throughput shall be kept. Monthly VOC emissions from the extraction process and monthly VOC emissions from combustion sources shall be calculated and updated no later than 30 days following the calendar month to which the record relates. The 12 month rolling VOC emission calculations shall be calculated and updated no later than 30 days following the calendar month to which the record relates.

Before modifying the calculation to include a VOC emission source not listed above, the owner or operator shall contact KDHE with information pertaining to the emission source or submit to KDHE the appropriate notifications of construction or modification, as described in K.A.R. 28-19-300.

K. The following emission sources are subject to the requirements listed below:

EU-1 / EP-1 / CE-1	Truck / Rail Receiving
EU-2 / EP-2, 3, 4 / CE-2, 3, 4	Elevator / Storage
EU-3 / EP-5 / CE-5	Flat storage
EU-4 / EP-12 / CE-12	Rotex Screen
EU-5 / EP-6 / CE-6	Cracking / Flaking
EU-6 / EP-7 / CE-7	Conditioning / Expelling / Material Transfer
EU-8 / EP-9, 10 / CE-9, 10	Desolventizer / Toaster / Dryer / Cooler
EU-9 / EP-11 / CE-11	Meal Sifting / Grinding
EU-10 / EP-12 / CE-16	Pellet Mill / Cooler
EU-11 / EP-13, 14 / CE-13,14	Meal storage
EU-12 / EP-15	Pellet Storage
EU-13 / EP-16 / CE-15	Transfer to Loadout
EU-14 / EP-16 / CE-15	Truck / Rail Loadout
EU-15 / EP-11 / CE-11	Flowability Agent Storage / Transfer
EU-16 / EP-17	Boiler # 1, Nebraska
EU-17 / EP-18	Boiler # 2, Kewanee
EU-18 / EP-19	Diesel Fire Pump, 340 hp
EU-19 / EP-20	Diesel Standby Generator, 250 hp

1. Limitation or Standard

Total plant-wide Particulate Matter (PM) emissions shall be limited to ≤ 249 tons of PM per any consecutive 12 month rolling period. In maintaining PM limits to less than or equal to 249 tons, PM₁₀ emissions will subsequently be limited to less than 249 tons per year. This PM limit replaces the PM emission limits established by the Construction Permit dated May 16, 1995 for those affected units permitted to be constructed at that time, and additionally includes all sources of PM emissions at the facility. [Construction Permit dated July 2, 2009]

a. Monitoring

- i. Monthly PM emissions shall be calculated in the following manner:

The total combined emissions of PM from the entire plant during each consecutive 12 month period shall be limited so that the following inequality is valid:

$$\{[\sum (\text{Process Throughput } i) * (\text{Emission Factor } i)]/2000\} \leq 249 \text{ tons PM}$$

Where: Process Throughput _i and Emission Factor _i are listed in the table below.

Process	Emission Factor
EU-1, Truck / Rail Receiving	1.37 x 10 ⁻³ lb/ton processed
EU-1, Rail Receiving (fugitive)	1.6 x 10 ⁻² lb/ton processed
EU-2, Elevator / Storage	3.92 x 10 ⁻³ lb/ton processed
EU-3, Flat storage	5.13 x 10 ⁻³ lb/ton processed
EU-4, Rotex Screen EU-10, Pellet Mill / Cooler	3.76 x 10 ⁻² lb/ton processed
EU-5, Cracking / Flaking	6.09 x 10 ⁻³ lb/ton processed
EU-6, Conditioning / Expelling / Material Transfer	1.69 x 10 ⁻² lb/ton processed
EU-8, Desolventizer / Toaster / Dryer / Cooler	3.47 x 10 ⁻² lb/ton processed
EU-9, Meal Sifting / Grinding	7.26 x 10 ⁻³ lb/ton processed
EU-11, Meal storage	6.21 x 10 ⁻⁶ lb/ton processed
EU-12, Pellet Storage	7.52 x 10 ⁻⁴ lb/ton processed
EU-13, Transfer to Loadout EU-14, Truck Rail Loadout	3.96 x 10 ⁻² lb/ton processed
EU-14, Truck / Rail Loadout (fugitive)	1.35 x 10 ⁻² lb/ton processed
EU-15, Flowability Agent Storage / Transfer	3.25 x 10 ⁻³ lb/ton processed
EU-16, Nebraska Boiler # 1 EU-17, Kewanee Boiler # 2	7.6 lb/MMCF of Natural Gas fired
EU-16, Nebraska Boiler # 1	2.0 lb/Mgal of diesel fuel fired
EU-18, 340 hp Diesel Fire Pump	0.748 lb/hr of operation
EU-19, 250 hp Diesel Standby Generator	0.55 lb/hr of operation

b. Recordkeeping and Reporting

- i. The following monthly records shall be maintained:

- (a) Tons of product throughput for each unit listed above;
 - (b) Amount of natural gas, in million standard cubic feet, burned in EU-16 and EU-17;
 - (c) Amount of diesel fuel, in thousand gallons, burned in EU-16; and
 - (d) Number of hours of operation for EU-18 and EU-19
- ii. Monthly records shall be updated no later than 30 days following the calendar month to which the record relates.
 - iii. The 12 month rolling PM emission calculations shall be calculated and updated no later than 30 days following the calendar month to which the record relates.
 - iv. Before modifying the calculation to include a PM emission source not listed above, the owner or operator shall contact KDHE with information pertaining to the emission source or submit to KDHE the appropriate notifications of construction or modification, as described in K.A.R. 28-19-300.

L. The following emission sources are subject to the requirements listed below:

EU-16 / EP-17	Boiler # 1, Nebraska Boiler, Model NSE-58, with a maximum rated heat input of 75 MMBtu/hr
EU-17 / EP-18	Boiler # 2, Kewanee Boiler, Model H3S600KG, with a maximum rated heat input of 25.106 MMBtu/hr

1. Limitation or Standard

The owner or operator shall comply with the applicable section of 40 CFR Part 63 Subpart A, General Provisions and, Subpart DDDDD, *NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*. These requirements are summarized in this permit. If a conflict exists between the federal rule and what is summarized in **Section VI.L.** of this permit, the requirements of the federal rule shall take precedence. These requirements apply at all times each affected unit is operating except for the periods noted in 40 CFR 63.7500(f). [40 CFR 63.7505(a)]. **Compliance deadline is January 31, 2016.** [40 CFR 63.7495(b)]

Boiler # 2 Kewanee Boiler is an existing boiler defined in the units designed to burn gas 1 fuels subcategory (natural gas).

Boiler # 1, Nebraska Boiler is an existing boiler in the units designed to burn gas 1 fuels subcategory with a potential to operate in the units designated to burn light liquid fuel subcategory (fuel oil or vegetable oil).

a. Monitoring

- i. The owner or operator shall comply with the emission limits, work practice standards, and operating limits in Tables 1 through 3, and 11 through 13 to 40 CFR Part 63 Subpart DDDDD applicable to each boiler, except as provided under 40 CFR 63.7522. [40 CFR 63.7500(a)(1)]
- ii. Per 40 CFR 63.7505(a), the owner or operator must be in compliance with the

emission limits, work practice standards, and operating limits in this subpart. These emission and operating limits apply to the owner or operator, at all times the affected unit is operating except for the periods noted in 40 CFR 63.7500(f).

- iii. The owner or operator shall comply with initial compliance demonstrations, fuel analysis and performance testing required of 40 CFR 63.7510, in Tables 1 or 2 or 11 through 13 of 40 CFR Part 63 Subpart DDDDD, and as described in 40 CFR 63.7530, as applicable to the subcategory of each boiler.
- iv. The owner or operator shall comply with the applicable subsequent performance testing, fuel analyses and/or tune-ups as required by 40 CFR 63.7515.
- v. Performance testing, as applicable to the subcategory of each boiler, must be conducted according to 40 CFR 63.7(c), (d), (f), and (h) and according to 40 CFR 63.7520.
- vi. The owner or operator shall comply with the fuel analyses and fuel specifications as applicable to the subcategory of each boiler according to 40 CFR 63.7521.
- vii. If the owner or operator elects to demonstrate compliance by emission averaging, the owner or operator shall comply with 40 CFR 63.7522 and 63.7541.
- viii. The owner or operator shall comply with the applicable monitoring, installation, operation and maintenance requirements of 40 CFR 63.7525.
- ix. The owner or operator shall comply with the requirements for monitoring and data collecting as applicable to the subcategory of each boiler according to 40 CFR 63.7535.
- x. The owner or operator shall comply with the continuous compliance demonstrations for the emission limitations, fuel specifications and work practice standards according to 40 CFR 63.7540 and Tables 1 through 3, and 11 through 13 to 40 CFR Part 63 Subpart DDDDD.
- xi. The owner or operator shall comply with the General Provisions of 40 CFR Part 63 Subpart A as specified in Table 10 to 40 CFR Part 63, Subpart DDDDD, which details the applicable parts of 40 CFR 63.1 through 63.15.

b. Recordkeeping and Reporting

- i. The owner or operator shall comply with the applicable notification requirements of 63.7545 and with the requirements of sections of 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified.
- ii. The owner or operator shall comply with the applicable recordkeeping requirements of 40 CFR 63.7555.
- iii. The owner or operator shall comply with the applicable reporting requirements of 40 CFR 63.7550.

M. The following emission sources are subject to the requirements listed below:

EU-18 / EP-19
EU-19 / EP-20

Diesel Fire Pump, 340 hp
Diesel Standby Generator, 250 hp

1. Limitation or Standard

The owner or operator shall comply with the applicable requirements of 40 CFR Part 63, Subpart *ZZZZ*, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*. **These requirements are summarized in this permit.** If a conflict exists between the federal rule and what is summarized in **Section VI.M.** of this permit, the requirements of the federal rule shall take precedence. These standards apply at all times when the engines are in operation. [40 CFR 63.6605(a)]

At the time of permit issuance, these engines are classified as existing CI emergency engines.

a. Monitoring

- i. The owner or operator shall comply with the applicable operational requirements outlined in **Table 2d to Subpart ZZZZ of Part 63 – Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions.** [40 CFR 63.6603(a)] The owner or operator shall comply as follows:
 - (a) Change oil and filter every 500 hours of operation or annually, whichever comes first;
 - (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
- ii. The owner or operator shall comply with the work or management practices outlined in **Table 6 to Subpart ZZZZ of Part 63 – Continuous Compliance With Emission Limitations, and Other Requirements.** [40 CFR 63.6640]
 - (a) Operate and maintain the engine according to the manufacturer's emission-related operation and maintenance instructions; or
 - (b) Develop and follow a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
- iii. The owner or operator must operate and maintain the engine, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. [40 CFR 63.6605(b)]
- iv. The owner or operator must operate and maintain the engine (and after-treatment control device if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine(s) in a manner consistent with good air pollution control practice for minimizing emissions.[40 CFR 63.6625(e)]
- v. If the owner or operator is contractually obligated for the engine to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR

63.6640(f)(2)(ii) and (iii) or if the engine operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), then the diesel fuel must meet the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted.

- vi. The engine shall be equipped with a non-resettable hour meter. [40 CFR 63.6625(f)]
- vii. The owner or operator must operate the emergency engine according to the requirements in paragraphs 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency engine, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 40 CFR 63.6640 (f)(1) through (4), is prohibited. If the engine is not operated according to the requirements in paragraphs 40 CFR 63.6640 (f)(1) through (4), the engine will not be considered an emergency and must meet all requirements for non-emergency engines.

b. Recordkeeping and Reporting

- i. An emergency engine that operates or is contractually obligated to be available for more than 15 hours per year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in 40 CFR 63.6640(f)(4)(ii) shall comply with the applicable requirements of **Table 7 to Subpart ZZZZ of Part 63 – Requirements for Reports**. [40 CFR 63.6650]
- ii. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

N. The following emission sources are subject to the requirements listed below:

EU-07/ EP-8/CE-8

Extractor/Mineral Oil Scrubber

1. The processing of DDGS is defined as an exempt period per 40 CFR Part 63.2872. However, ADM is required to categorize the operating status of the source for each recorded time interval as described in Table 1 of 40 CFR 63.2853, which includes exempt periods of operation.
2. By the end of each calendar month for which DDGS has been processed, the owner or operator shall calculate the monthly solvent loss that occurred during that period. Monthly Actual Solvent Loss for periods during which DDGS was processed shall be calculated using the same equation required to be used by 40 CFR 63.2853(b) 5 for normal operations (when the source is processing oil seeds). The following equation shall be used:

$$\sum_{i=1}^n (\text{SOLV}_B - \text{SOLV}_E + \text{SOLV}_R \pm \text{SOLV}_A) i$$

Where:

SOLVB = Gallons of solvent in the inventory at the beginning of the exempt operating period “i”.

SOLVE = Gallons of solvent in the inventory at the end of exempt operating period “i”.

SOLVR = Gallons of solvent received between the beginning and ending inventory dates of exempt operating period “i”.

SOLVA = Gallons of solvent added or removed from the extraction solvent inventory during exempt operating period “i”.

n = Number of exempt operating periods in a calendar month.

3. The owner or operator shall update the facility recordkeeping requirements and compliance demonstration plan, as applicable, to include operating status for exempt operations, which will include the times DDGS is processed, as required by 40 CFR 63.2862.

[Per Construction Permit issued on October 5, 2016]

Since monitoring, recordkeeping, and reporting requirements are required in **Section VI. Applicable Requirements**, the facility is required to submit a semi-annual report every six months. Refer to **Section XIV. G., Compliance Certification** for the submittal dates of required reports.

VII. Opacity Summary

All emission units other than those listed below are limited to opacity limits which are less than or equal to 20% opacity.

Stack/Vent ID	Emission Source ID	Emission Source Opacity Requirement
None	IA-01	40
None	IA-06	40

VIII. Facility-Wide Applicable Requirements

The permittee shall comply with the following when required by the relevant regulation:

A. **K.A.R. 28-19-30 through K.A.R. 28-19-32, Indirect Heating Equipment Emissions**

Except as provided in K.A.R. 28-19-32, aggregated emissions of particulate matter from indirect heating equipment shall not exceed those specified in table H-1 of K.A.R. 28-19-31(a), or for equipment having intermediate heat input between 10 MMBtu/hr and 10,000 MMBtu/hr, the allowable emission rate may be determined by the equation provided at K.A.R. 28-19-31(a).

Records shall be maintained of any recalculations and evaluations. These records shall include the design rate capacity of the unit, emission factors used in calculations and potential/allowable emission rates.

B. K.A.R. 28-19-55 through K.A.R. 28-19-58, Air Pollution Emergency Episode Plans

The permittee shall comply with the requirements of K.A.R. 28-19-55 through 28-19-58, Air Pollution Emergency Episode Plans, and shall maintain on site an emergency episode plan if the KDHE requires an emergency episode plan be developed pursuant to K.A.R. 28-19-58.

C. K.A.R. 28-19-210, Calculation of Actual Emissions

The following applies to emission control equipment not otherwise addressed in this permit:

If the owner or operator uses air emission control equipment, not otherwise addressed in this permit, to calculate actual emissions, the air emission control equipment shall be maintained in accordance with the manufacturer's recommendation. The owner or operator shall keep a written log recording the date and type of action taken when performing preventive or other maintenance on the air emission control equipment.

D. K.A.R. 28-19-517, Annual Emissions Inventory and Fees

1. Annual Emissions Inventory:

The owner or operator shall submit all operating or relevant information to estimate emissions for the preceding year to the KDHE. This information shall be submitted on or before the date specified at K.A.R. 28-19-517 or amendments thereto.

2. Annual Emissions Fee:

The owner or operator of a permitted emissions unit or stationary source is required to pay fees to the permitting authority consistent with the fee schedule set out in the regulations pursuant to K.A.R. 28-19-517(b).

3. Submittal:

Each annual emissions inventory and each annual emissions fee shall be submitted on forms provided or approved by the KDHE as specified in K.A.R. 28-19-517(c). At the time of permit issuance, the due date for submittal of this information is on or before April 1 of each year.

4. Late Fee and refund:

Each owner or operator who fails to submit the annual emission inventory and pay the annual emissions fee by the due date specified shall pay a late fee as specified in K.A.R. 28-19-517(d) and any overpayment of \$100.00 or more made by the owner or operator of a stationary source may be refunded.

E. K.A.R. 28-19-645, Open Burning

The permittee is prohibited from conducting open burning, except as allowed by K.A.R. 28-19-647 and K.A.R. 28-19-648.

F. K.A.R. 28-19-735, Which Adopts by Reference 40 CFR Part 61 Subpart A, General Provisions, and Subpart M, NESHAP for Asbestos

The permittee shall comply with the National Emission Standard for Hazardous Air Pollutants (NESHAP) 40 CFR Part 61 Subpart A, General Provisions, and Subpart M, National Emission Standard for Asbestos, adopted by K.A.R. 28-19-735 and K.A.R. 28-50-1 et seq., when conducting any renovation or demolition activities at the facility.

G. 40 CFR Part 68, Chemical Accident Prevention Provisions

Chemical Accident Prevention Provisions, 40 CFR Part 68, is applicable to an owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined in 40 CFR 68.115.

If the stationary source is subject to 40 CFR Part 68, but is not required to comply with those requirements as of the effective date of this operating permit, the stationary source shall be in compliance with the requirements of 40 CFR Part 68 no later than the latest of the following dates:

1. Three years after the date on which a regulated substance is first listed in 40 CFR 68.130; or
2. The date on which a regulated substance is first present above a threshold quantity in a process.

H. 40 CFR Part 82, Protection of Stratospheric Ozone

The permittee shall comply with 40 CFR Part 82, Protection of Stratospheric Ozone. Affected controlled substances include, but are not limited to, chlorofluorocarbons, hydrochlorofluorocarbon refrigerants, halons, carbon tetrachloride, and methyl chloroform (specific affected controlled substances are listed in 40 CFR Part 82, Subpart A, appendices A {Class I} and B {Class II}).

The following subparts and sections of 40 CFR Part 82 are conditions of this permit:

- Subpart A - Production and Consumption Controls
- Subpart B - Servicing of Motor Vehicle Air Conditioners
- Subpart E - Labeling of Products Using Ozone-Depleting Substances: Section; 82.106 Warning statement requirements, 82.108 Placement of warning statement, 82.110 Form of label bearing warning statement, and 82.112 Removal of label bearing warning statement
- Subpart F - Recycling and Emissions Reduction: Sections; 82.156 Required practices, 82.158 Standards for recycling and recovery equipment, 82.161 Technician certification, and 82.166 Reporting and recordkeeping requirements
- Subpart G - Significant New Alternatives Policy Program

IX. Opacity Limitations and Monitoring

Except as otherwise provided in K.A.R. 28-19-9, K.A.R. 28-19-11, and K.A.R. 28-19-650(c) or as otherwise identified in the Applicable Requirements portion of this permit, K.A.R. 28-19-650(a)(3) limits visible air emissions from each emission unit to 20%. K.A.R. 28-19-31(b)(2) limits visible air emissions from any indirect heating equipment to less than 20%.

Except as otherwise provided in the applicable requirements portion of this permit, emissions from the following or similar activities do not require routine periodic monitoring: emissions vented inside an enclosed building or structure, from cooling towers, and from evaporative VOC sources; and emissions from turbines, reciprocating internal combustion engines, burners in indirect heating applications, and space heaters when burning natural gas, propane/LPG, or refinery gas.

Routine periodic monitoring requirements: Except as otherwise provided in the applicable requirements portion of this permit or as provided above, the owner or operator shall perform a qualitative assessment at least once per

calendar month, with at least one week between assessments. The monthly qualitative assessment shall include each activity at the facility, which is operating at the time scheduled. For each activity from which the opacity of visible emissions appears to exceed the limit, the permittee shall take appropriate action to correct process operating parameters, after which the permittee shall perform an additional qualitative assessment for that unit. If, at the end of ten operating days from the date of the possible exceedance, opacity of visible emissions appears to continue to exceed the limit, the owner or operator shall notify the agency, within seven days of the end of the ten operating day period, and shall schedule a test utilizing EPA Method 9, of visible emissions from the unit appearing to exceed the limit, within 30 days of the end of the ten operating day period.

The person responsible for making qualitative opacity assessments shall be knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting and wind, and the presence of uncombined water in the plume.³ The permittee shall keep records of each qualitative assessment, which shall include the time and date of the assessment, a description of the emission point from which any unusual emissions emanated, the steps taken to correct any abnormal emissions, and the name of the person conducting the assessment.

The KDHE Bureau of Air does not consider a qualitative assessment in which emissions appear to exceed the applicable opacity limits to be a violation or deviation subject to reporting in accordance with **Section XIII. Reporting of Deviations from Permit Terms**. A Method 9 evaluation that shows opacity exceeding the emission limit would be subject to reporting in accordance with **Section XIII. Reporting of Deviations from Permit Terms**.

X. Requirements Which Will Become Applicable During the Permit Term

The owner or operator, in accordance with the provisions of K.A.R. 28-19-511(b)(16)(C)(ii) and K.A.R. 28-19-512(a)(23) shall comply in a timely manner with those applicable requirements that become effective during the permit term.

XI. Permit Shield

Compliance with the conditions of this permit shall be deemed in compliance with the applicable requirements of the Kansas air quality program as of the date of permit issuance. This shield applies only to:

- A. Applicable requirements included, and specifically identified in the permit; and
- B. Applicable requirements that the KDHE has specifically identified in writing as not being applicable to the emissions unit or stationary sources and the determination or a concise summary thereof is included in the permit.

Nothing in this permit shall alter or affect:

- A. The liability of a permittee for any violation of an applicable requirement occurring prior to or at the time of issuance of this permit;
- B. U.S. EPA's ability to obtain information under Section 114 of the federal Clean Air Act
- C. The provisions of Section 303, Emergency orders, of the federal Clean Air Act, including the authority of the administrator of the U.S. EPA under that section or the air pollution emergency provisions of the Kansas air quality program regulations, K.A.R. 28-19-55 through 28-19-58; or

³ For basic information about opacity observations, refer to 40 CFR Part 60 Appendix A, Method 9.

- D. The applicable requirements of the acid rain program, consistent with section 408(a) of the Act. [K.A.R. 28-19-512(b)]

XII. Testing, Monitoring, Recordkeeping and Reporting

Testing, monitoring, recordkeeping and reporting requirements sufficient to assure compliance with the terms and conditions of the permit are required. [K.A.R. 28-19-512(a)(21)]

In addition to any testing, monitoring, recordkeeping, or reporting requirement contained in **Section VI. Applicable Requirements**, monitoring and reporting may be required under the provisions of K.A.R. 28-19-12, Measurement of Emissions, or as required by any other provision of the federal Clean Air Act.

Records to support all monitoring and copies of all reports required by the permit must be maintained for a period of at least five years from the date of the activity. [K.A.R. 28-19-512(a)(10)(G)]

Summary reports of any routine, continuous, or periodic monitoring must continue to be submitted at six-month intervals for the duration of the permit. The reporting periods and due dates for these reports are identified in **Section XIV. G. Compliance Certification**. All instances of deviations from permit requirements, **including perceived opacity exceedances**, shall be clearly identified in the report. All reports shall be certified by a responsible official. [K.A.R. 28-19-512(a)(11)(A)]

Submission of quarterly or semi-annual reports required by any applicable requirement which duplicate the reporting required in the previous paragraph will satisfy the reporting requirements of the previous paragraph if noted on the submitted report. [K.A.R. 28-19-512(a)(9)]

Records of required monitoring shall include:

- A. The date, place, and time of sampling or measurement;
- B. The date(s) analyses were performed;
- C. The company or entity which performed the analyses;
- D. The analytical techniques or methods used;
- E. The results of the analyses;
- F. The operating conditions that existed at the time of sampling or measurement; and
- G. The retention of records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. [K.A.R. 28-19-512(a)(10)]

XIII. Reporting of Deviations from Permit Terms

Unless a different time period is specified in this permit, deviations from the requirements of this permit shall be reported to the KDHE as follows:

- A. Deviations which result in emissions exceeding those allowed in this permit shall be reported the next business day following the discovery of the release, with follow-up written notice within five business days following discovery of the release. The report shall include the probable cause of such deviations and any corrective actions or preventive measures taken.
- B. Deviations which do not result in emissions exceeding those allowed in this permit shall be reported in writing within ten business days following discovery of the deviation.

Oral notification shall be made to the air program compliance staff in the KDHE central office in Topeka.

Written notifications shall also be made to the KDHE central office through KEIMS at

<https://www.kdheks.gov/bar/keims-BOA.html> [K.A.R. 28-19-512(a)(11)]

XIV. General Provisions

A. K.A.R. 28-19-11, Enforcement Discretion Due to Startup, Shutdown, Malfunctions, or Scheduled Maintenance

An emission source having emissions that are in excess of the applicable emission limitation and standard specified at K.A.R. 28-19-650, K.A.R. 28-19-20, K.A.R. 28-19-30 through 32, and result from startup, shutdown, malfunctions, or scheduled maintenance of control or processing equipment and appurtenances may be exempt from enforcement action at the secretary's discretion if both of the following conditions are met:

1. The person responsible for the operation of the emission source notifies the KDHE of the occurrence and nature of the excess emissions resulting from startup, shutdown, malfunctions, or scheduled maintenance, in writing, within ten (10) days of discovery of the excess emissions.
2. Reasonable action is taken regarding the occurrence specified in paragraph (a)(1) to initiate and complete any necessary repairs and place the equipment back in operation as quickly as possible.

Emissions that are in excess of the applicable emission source emission limitation and standard specified at K.A.R. 28-19-650, K.A.R. 28-19-20, K.A.R. 28-19-30 through 32, and result from startup, shutdown, or malfunctions shall be evaluated by the secretary for potential enforcement action based on the frequency and severity of the excess emissions.

Emissions that are in excess of the applicable emission source emission limitation and standard and result from scheduled maintenance of control or processing equipment and appurtenances shall be evaluated by the secretary for potential enforcement action based on the following: (1) the severity of the excess emissions; (2) any prior approval for scheduled maintenance by the secretary; and (3) demonstration that the scheduled maintenance cannot be accomplished by maximum reasonable effort, including off-shift labor where required, during periods of shutdown of any related control or processing equipment.

Any exemption granted under this regulation may be rescinded if the secretary obtains additional information and deems enforcement action necessary based upon this information.

Lack of enforcement for excess emissions under this regulation shall not preclude the taking of enforcement action by USEPA or through private citizen lawsuits.

B. K.A.R. 28-19-752a, Hazardous Air Pollutants; Limitations Applicable to Construction of New Major Sources or Reconstruction of Existing Major Sources

This regulation shall continue in effect for an emissions unit or stationary source until a standard has been promulgated which is applicable to such source pursuant to section 112(d) of the federal Clean Air Act.

This regulation shall apply whenever construction of a new major source or reconstruction of an existing major source of hazardous air pollutants is proposed.

C. Permit Term and Renewal

This permit has a term of five years unless otherwise stated in this permit. A complete application, as defined in K.A.R. 28-19-518, and any applicable fee must be submitted to the KDHE not less than six months and not more than 18 months prior to the expiration date. This operating permit shall not expire on the expiration date if a complete and timely application has been filed with the KDHE. [K.A.R. 28-19-512(a)(8) and K.A.R. 28-19-514]

D. Severability

The provisions of this permit are severable, and if any portion 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 circumstance, and the remainder of this permit, shall not be affected thereby. [K.A.R. 28-19-512(a)(13)]

E. Property Rights

This permit does not convey any property rights of any sort or any exclusive privilege. [K.A.R. 28-19-512(a)(14)(D)]

F. Compliance

The owner or operator shall comply with all conditions of the permit and shall continue to comply with applicable requirements with which the owner or operator is in compliance, in accordance with K.A.R. 28-19-511(b)(16)(C)(i). Any permit noncompliance shall constitute a violation of the Kansas Air Quality Act and shall be grounds for enforcement action, for permit revocation or amendment, or for denial of a permit renewal application. All permit terms and conditions are federally enforceable.

It shall not be a defense for a permittee in an enforcement action to contend that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

This permit may contain provisions which require that data from specific test methods, monitoring, or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Sec. 51.212; 40 CFR Sec.52.12; 40 CFR Sec. 60.11; 40 CFR Sec. 61.12; and incorporation of 40 CFR Sec. 52.33, that allow the use of any credible evidence to establish compliance with applicable requirements. At the issuance of this permit, the State of Kansas has incorporated these provisions in its air quality regulations K.A.R. 28-19-212(c) and (d), K.A.R. 28-19-350, K.A.R. 28-19-720 and K.A.R. 28-19-735. [K.A.R. 28-19-512(a)(14)]

G. Compliance Certification

The permittee shall annually submit a certification of compliance (Form CR-02, “Annual Certification”) to the system or address required in **Section XIV. N. Submissions**.

The due date of the certification will continue to be January 31st of each year for the period from January 1 to December 31 or the previous year.

The semiannual summary reports required by **Section XII. Testing, Monitoring, Recordkeeping and Reporting** shall be submitted by the dates specified below for each subsequent reporting period:

- The report covering the period from July 1 to December 31 shall be submitted by January 31 of each year, and
- The report covering the period from January 1 to June 30 shall be submitted by July 31 of each year.

The certification shall include the permit term or condition that is the basis of the certification; the current compliance status; whether compliance was continuous or intermittent; the method or methods used for determining the compliance, currently and over the reporting period; and such other facts as the KDHE may require to determine the compliance status of the source. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate and complete.

[K.A.R. 28-19-512(a)(26) and K.A.R. 28-19-512(a)(27)]

H. Emergency

An “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

An emergency shall constitute an affirmative defense to an action brought for noncompliance with such technology-based emission limitation if the conditions below are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs or relevant evidence that:

1. An emergency occurred and that the permittee can identify the cause or causes of the emergency;
2. The permitted facility was at the time being properly operated;
3. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and
4. The permittee submitted notice of the emergency, containing a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken, to the KDHE within two working days of the time when emission limitations were exceeded due to the emergency.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

These emergency provisions are in addition to any emergency or upset provisions contained in any applicable requirement. Whenever these emergency provisions conflict with the provisions of K.A.R. 28-19-11, these emergency provisions shall control.

[K.A.R. 28-19-512(d)]

I. Inspection and Entry

Upon presentation of credentials and other documents as may be required by law, representatives of the KDHE, including authorized contractors of the KDHE, shall be allowed by the permittee to:

1. enter upon the premises where a regulated facility or activity is located or conducted or where records are kept under conditions of this document;
2. have access to and copies of, at reasonable times, any records that must be kept under conditions of this document;
3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this document; and
4. as authorized by the Kansas Air Quality Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
[K.A.R. 28-19-512(a)(22)]

J. Permit Amendment, Modification, Reopening, and Changes Not Requiring a Permit Action

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

The permitting authority will reopen and revise or revoke this permit as necessary to remedy deficiencies in the following circumstances:

1. Additional requirements under the federal Clean Air Act become applicable to the source three or more years prior to the expiration date of this permit. 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. It is determined by the KDHE that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
3. It is determined by the KDHE that it is necessary to revise or revoke this permit in order to assure compliance with applicable requirements.

This document is subject to periodic review and amending as deemed necessary to fulfill the intent and purpose of the Kansas Air Quality Statutes and the Kansas Air Quality Regulations.

No permit revision shall be required under any approved economic incentives, pollution prevention incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit.

[K.A.R. 28-19-513]

K. Duty to Provide Information

Unless a different time frame is specified in this permit, the permittee shall furnish to the KDHE any information that the KDHE may request in writing within 60 days of the request, unless the KDHE specifies another time period. Submittal of confidential business information must be in accordance with the KDHE procedures. [K.A.R. 28-19-518(c) and K.A.R. 28-19-512(a)(14)(E)]

L. Duty to Supplement

The permittee, upon becoming aware that any relevant facts were omitted from or incorrect information was included in any submittal, shall promptly submit such supplementary facts or corrected information.
[K.A.R. 28-19-518(e)]

M. Other Permits and Approvals; Applicability

A construction permit or approval must be obtained from the KDHE prior to commencing any construction or modification of equipment or processes which results in potential emission increases equal to or greater than the thresholds specified at K.A.R. 28-19-300.

This document does not relieve the permittee of the obligation to obtain any approvals, permits, licenses, or documents of sanction which may be required by other federal, state, or local government agencies. [K.A.R. 28-19-512(a)(29)]

N. Submissions

Written notification of malfunctions, exceedances, and deviations shall be submitted through KEIMS. Questions regarding submission may be sent to the following email address: KDHE.BOAKEIMS@ks.gov.

EPA regulations codified in 40 CFR Part 60, 62, and 63 require affected sources to electronically submit performance test reports, notification reports, and periodic reports to EPA, as specified in the affected regulations. As a result, the EPA has developed the Compliance and Emissions Data Reporting Interface (CEDRI), which is accessed through the EPA's **Central Data Exchange (CDX)** (<https://cdx.epa.gov/>).

The CDX Web is the application used by EPA programs and various stakeholders to manage environmental data transmitted to EPA in order to meet EPA's electronic reporting requirements. **The source must begin submitting required reports via CEDRI no later than 90 days after the form becomes available in CEDRI.** However, if the reporting form is not available in CEDRI at the time that the report is due, the source must submit the report to the Administrator [address listed in 40 CFR 63.13]:

Kansas Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

All other reports, notifications, information, and other correspondence (including submission of the Annual Certification Form CR-02) shall be submitted through the Kansas Environmental Information Management System (KEIMS):

<http://www.kdheks.gov/bar/keims-BOA.html>

A copy of each Annual Certification Form CR-02 shall be submitted to either CEDRI, unless it contains confidential business information, or the address below:

Kansas Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA, Region 7
11201 Renner Blvd.
Lenexa, Kansas 66219

The Annual Certification shall be certified by a responsible official. This certification shall state that, based on the information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete.

[K.A.R. 28-19-512(a)(21) and K.A.R. 28-19-512(a)(27)]

When specified in the permit, contact the NWDO local office at:

Northwest District Office
2301 East 13th Street
Hays, Kansas 67601-2651
(785) 625-5663

Permit Writer

Rumela Bhadra, Ph.D.
Engineering Associate
Air Permitting Section

RB:
c: NWDO
OP100330 v5.0

ATTACHMENT A

List of Acronyms and Symbols

List of Acronyms and Symbols

Acronym or Symbol	Description
<	less than
>	greater than
µm	micrometer (or micron, 10 ⁻⁶ meter)
acfm	actual cubic feet per minute
AP-42	Compilation of Air Pollutant Emission Factors (U.S. EPA)
ASTM	American Society for Testing and Materials (now ASTM International)
BACT	best available control technology
BOA	Bureau of Air
Btu	British thermal unit
CAA	Clean Air Act (1970)
CAAA	Clean Air Act Amendments (1990)
CAS	Chemical Abstracts Service
CD	compliance demonstration (form)
CDE	control device efficiency
CE	capture efficiency
CEM	continuous emission monitor(ing)
CEMS	continuous emission monitoring system
CFC	chlorofluorocarbon
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CMS	continuous monitoring system
CO	carbon monoxide
COM	continuous opacity monitor(ing)
COMS	continuous opacity monitoring system
CR	certification (form)
CTG	Control Techniques Guideline (U.S. EPA)
dscf	dry standard cubic foot
dscm	dry standard cubic meter
EG	emission guideline
EM	emission calculations (form)
EPA	Environmental Protection Agency (or U.S. EPA)
EU	emission unit
FGR	flue gas recirculation
FR	Federal Register
g	gram
GDV	gasoline delivery vessel
GI	general information (form)
GOP	General Operating Permit
gph	gallons per hour
gpm	gallons per minute
gr	grain (1/7000 lb avoirdupois)
HC	hydrocarbon
HCFC	hydrochlorofluorocarbon
HMIWI	hospital/medical/infectious waste incinerator
hp	horsepower
KDHE	Kansas Department of Health and Environment

kW	kilowatt
HON	hazardous organic NESHAP
IA	insignificant activity
JCED	Johnson County Environmental Department
K.A.R.	Kansas Administrative Regulation
K.S.A.	Kansas Statutes Annotated
LAER	lowest achievable emission rate
MACT	maximum achievable control technology
MBtu	thousand Btu
ME	monitoring equipment (form)
Mg	megagram (10 ⁶ grams, also 1 metric ton)
MMBtu	million Btu
MOD	modification (form)
MON	miscellaneous organic NESHAP
MSDS	material safety data sheet
MSW	municipal solid waste
MWC	municipal waste combustor
MWI	medical waste incinerator
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NCDO	North Central District Office (KDHE)
NEDO	Northeast District Office (KDHE)
NESHAP	national emission standard(s) for hazardous air pollutants
NMOC	non-methane organic compound
NO _x , NO _x , NO _x	nitrogen oxides
NSPS	new source performance standard
NSR	new source review
NWDO	Northwest District Office (KDHE)
OAQPS	Office of Air Quality Planning and Standards (U.S. EPA)
OM&M	operation, maintenance, and monitoring
OSHA	Occupational Safety and Health Administration (U.S. Dept. of Labor)
P2	pollution prevention
PAL	plant-wide applicability limitation
PCB	polychlorinated biphenyl
PCD	pollution control device
PM	particulate matter
PM ₁₀ , PM ₁₀	PM with an aerodynamic diameter of less than or equal to 10 μm
PM _{2.5} , PM _{2.5}	PM with an aerodynamic diameter of less than or equal to 2.5 μm
PMD	portable monitoring device
ppmw	parts per million, weight basis
PSD	prevention of significant deterioration
psia	pounds per square inch, absolute
psig	pounds per square inch, gauge
PTE	potential to emit, potential-to-emit
QA/QC	quality assurance / quality control (plan)
RACT	reasonable available control technology
RATA	relative accuracy test audit
RMP	risk management plan
RVP	Reid vapor pressure (psia at 100° Fahrenheit)
SCDO	South Central District Office (KDHE)

scfm	standard cubic feet per minute
SCHA	Shawnee County Health Agency
SEDO	Southeast District Office (KDHE)
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SMSA	standard metropolitan statistical area
SOCMI	synthetic organic chemical manufacturing industry
SO _x , SO _x , SOX	sulfur oxides (typically measured as sulfur dioxide, SO ₂)
SWDO	Southwest District Office (KDHE)
TOC	total organic carbon
tpy	tons per year
TRS	total reduced sulfur
TSP	total suspended particulate(s)
U.S. EPA, USEPA	United States Environmental Protection Agency
USC	United States Code
VOC	volatile organic compound
VOL	volatile organic liquid
WDEH	Wichita Department of Environmental Health
WYCO-KCK	Unified Government of Wyandotte County and Kansas City, Kansas Health Department

ATTACHMENT B

Site Diagram

ATTACHMENT C

CAM Plan

Northern Sun Co., A Division of Archer Daniels Midland Co.
Goodland, KS. Source ID No. 180018

Compliance Assurance Monitoring (CAM) Plan
For Control of Particulate Emissions

Emission Unit / Emission Point

EU-5 / EP-6
EU-8 / EP-9,10
EU-9 / EP-11
EU-10 / EP-12

CAM Applicability
Potential Uncontrolled Non-Combustion PM/PM10 Emissions

Emission Unit ID	Description	Control Equipment ID	Emission Point ID	MHDR (tph)	Throughput (tpy)	Uncontrolled Emission Factor (lb/ton)		EP Source	Capture Efficiency	Uncontrolled Annual Emissions (tpy)						
						PM	PM10			PM	PM10					
EU-1	Truck/Rail Receiving - Point	CE-1	EP-1	352	507,150	0.15	0.0375	AP-42 Table 9.11.1-1 Receiving (SCC 3-02-007-81) Uncontrolled	95%	36.13	9.03					
	Truck/Rail Receiving - Fugitive									1.80	0.48					
	Truck/Rail Receiving - Total									38.04	9.51					
EU-2	Elevators (includes to/from Flat Storage)	CE-2	EP-2	50	1,014,300	0.061	0.034	AP-42 Table 9.9.1-1 Headhose and grain handling (SCC 3-02-005-30) Uncontrolled	100%	30.94	17.24					
		CE-3	EP-3													
		CE-4	EP-4													
EU-3	Flat Storage	CE-5	EP-5	140	507,150	0.061	0.034	AP-42 Table 9.9.1-1 Headhose and grain handling (SCC 3-02-005-30) Uncontrolled	100%	15.47	6.62					
EU-4	Rotex Screen	CE-12	EP-12	280	507,150	0.375	0.094	AP-42 Table 9.9.1-1 Grain cleaning Internal vibrating (SCC 3-02-005-37) Cyclone (CE=0.90)	100%	95.09	23.77					
EU-5*	Cracking	CE-6	EP-6*	105.7	507,150	0.120	0.060	AP-42 Table 9.9.1-2 Grain cracker (SCC 3-02-008-19) Cyclone (CE=0.90)	100%	30.43	15.21					
	Flaking											0.37	0.24	AP-42 Table 9.11.1-1 Flaking rolls (SCC 3-02-007-88) Cyclone (CE=0.90)	93.82	60.96
	Total											--	--	--	124.25	76.20
EU-6	Conditioning/	CE-7	EP-7	70	507,150	0.1	0.025	AP-42 Table 9.11.1-1 Bean conditioning (SCC 3-02-007-67) Cyclone (CE=0.90)	100%	25.36	16.48					
	Expelling/Material Transfer											0.061	0.034	AP-42 Table 9.9.1-1 Headhose and grain handling (SCC 3-02-005-30) Uncontrolled	15.47	6.62
	Total											--	--	--	40.82	25.10
EU-8*	Desolventizer/Tosser (VOC)	CE-8	EP-8	67	304,290	--	--	--	--	--	--					
	Dryer	CE-9	EP-9*									1.8	1.098	AP-42 Table 9.11.1-1 Meal dryer (SCC 3-02-007-89) Cyclone (CE=0.90)	273.86	167.06
	Cooler	CE-10	EP-10*									1.9	1.159	AP-42 Table 9.11.1-1 Meal cooler (SCC 3-02-007-90) Cyclone (CE=0.90)	269.08	176.34
	Total PM/PM10	--	--									--	--	542.94	343.39	
EU-9*	Meal Sifting/Grinding	CE-11	EP-11*	86.6	304,290	3.4	2.21	AP-42 Table 9.11.1-1 Meal grinding/sizing (SCC 3-02-007-92) Cyclone (CE=0.90)	100%	817.29	336.24					
EU-10*	Pellet Mill/Cooler	CE-12	EP-12*	41.3	304,290	1.8	0.9	AP-42 Table 9.9.1-2 Pelletizing /Pellet cooler (SCC 3-02-008-16) Cyclone (CE=0.80)	100%	273.86	136.93					
EU-11	Meal Storage	CE-13	EP-13	45.2	304,290	0.025	0.0063	AP-42 Table 9.9.1-1 Storage bin (vent) (SCC 3-02-005-40) Uncontrolled	100%	3.80	0.96					
		CE-14	EP-14													
EU-12	Pellet Storage	N/A	EP-15	45.2	304,290	0.025	0.0063	AP-42 Table 9.9.1-1 Storage bin (vent) (SCC 3-02-005-40) Uncontrolled	0%	3.80	0.96					
EU-13	Transfer to Leadout	CE-15	EP-16	65	304,290	0.061	0.034	AP-42 Table 9.9.1-1 Headhose and grain handling (SCC 3-02-005-30) Uncontrolled	100%	9.28	5.17					
EU-14	Truck/Rail Leadout - Point	CE-15	EP-16	90	304,290	0.27	0.0675	AP-42 Table 9.11.1-1 Meal Leadout (SCC 3-02-007-91) Uncontrolled	95%	39.03	9.76					
	Truck/Rail Leadout - Fugitive									2.05	0.51					
	Truck/Rail Leadout - Total									41.08	10.27					
EU-15	Flowability Agent Storage/Transfer	CE-11	EP-11	0.2	1,752	0.8	0.4	FIRE/AIRS (SCC 3-05-009-05) Uncontrolled	100%	0.70	0.35					

* Included in CAM Plan

Monitoring Approach Submittal

I. Background

<i>Emission Unit and Description</i>	<i>Pollutant</i>	<i>Regulation Number</i>	<i>Emission Limit</i>	<i>Monitoring Requirements</i>	<i>Control Technology</i>
EU-5 (EP-6) Cracking/Flaking	PM/PM10	Permit to Construct (May 16, 1995)	8.95 lb/hr	O&M and Visible Emissions Observation	Cyclone
	Opacity	K.A.R. 28-19-650(a)(3)	20%		
EU-8 (EP-9,10) Dryer/Cooler	PM/PM10	Permit to Construct (May 16, 1995)	5.32 lb/hr	O&M and Visible Emissions Observation	Cyclone
	Opacity	K.A.R. 28-19-650(a)(3)	20%		
EU-9 (EP-11) Meal Sifting/Grinding	PM/PM10	K.A.R. 28-19-20	49.84 lbs/hr	O&M and Visible Emissions Observation	Baghouse / Fabric Filter
	Opacity	K.A.R. 28-19-650(a)(3)	20%		
EU-10 (EP-12) Pellet Mill/Cooler	PM/PM10	Permit to Construct (May 16, 1995)	4.16 lb/hr	O&M and Visible Emissions Observation	Cyclone
	Opacity	K.A.R. 28-19-650(a)(3)	20%		

Monitoring Approach Submittal

II. Monitoring Approach - Cyclones

Justification

Rationale for Selection of Performance Indicators
 Visible Emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of the cyclone. When the cyclone is operating optimally, there will be little visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the cyclone.

Implementation of a cyclone operating and maintenance (O&M) program provides assurance that the cyclone is in good repair and operating properly.

Rationale for Selection of Indicator Ranges
 The indicator range for opacity is visible emissions or no visible emissions. The permit limits the opacity to less than 20%. This indicator range was selected based on the facility permit.

	<i>Indicator No. 1</i>	<i>Indicator No. 2</i>
<i>Indicator</i>	Visible Emissions	Operation/Maintenance
<i>Measurement Approach</i>	Visible emission observations performed daily	Visible inspection of cyclone and its components. Maintenance is performed on an as needed basis. (See O&M Summary Description)
<i>Indicator Range</i>	The indicator range is any visible emissions or no visible emissions.	N/A
<i>Data Representativeness</i>	Observations are performed at the cyclone exhaust while the system is operating.	Visible external inspections of the cyclone are performed while the system is operating. Servicing of the unit is performed while the unit is not operating.
<i>Verification of Operational Status</i>	N/A	N/A
<i>QA/QC Practices and Criteria</i>	Observer is knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water.	Qualified persons perform inspections and maintenance.
<i>Monitoring Frequency</i>	Daily	Visible external inspections of the cyclone are performed daily. Servicing of the unit and its components is performed as needed or during shutdown periods.
<i>Data Collection Procedures</i>	Observations are conducted by a qualified observer. Observer logs whether visible emissions are present and corrective actions taken. Visible records are kept on file.	Inspections are logged. Work orders are generated and maintenance activities are recorded and kept on file.

Monitoring Approach Submittal

III. Monitoring Approach - Baghouse

Justification

Rationale for Selection of Performance Indicators
 Visible Emissions (opacity) was selected as a performance indicator because it is indicative of good operation and maintenance of the baghouse. When the baghouse is operating optimally, there will be little visible emissions from the exhaust. In general, an increase in visible emissions indicates reduced performance of the cyclone.

Implementation of a baghouse operating and maintenance (O&M) program provides assurance that the cyclone is in good repair and operating properly.

Rationale for Selection of Indicator Ranges
 The indicator range for opacity is visible emissions or no visible emissions. The permit limits the opacity to less than 20%. This indicator range was selected based on the facility permit.

	<i>Indicator No. 1</i>	<i>Indicator No. 2</i>
<i>Indicator</i>	Visible Emissions	Operation/Maintenance
<i>Measurement Approach</i>	Visible emission observations performed daily	Visible inspection of baghouse and its components. Maintenance and filter replacement is performed on an as needed basis. (See O&M Summary Description)
<i>Indicator Range</i>	The indicator range is any visible emissions or no visible emissions.	N/A
<i>Data Representativeness</i>	Observations are performed at the baghouse exhaust while the system is operating.	Visible external inspections of the baghouse are performed while the system is operating. Servicing of the unit is performed while the unit is not operating.
<i>Verification of Operational Status</i>	N/A	N/A
<i>QA/QC Practices and Criteria</i>	Observer is knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water.	Qualified persons perform inspections and maintenance.
<i>Monitoring Frequency</i>	Daily	Visible external inspections of the baghouse are performed daily. Servicing of the unit and its components is performed as needed or during shutdown.
<i>Data Collection Procedures</i>	Observations are conducted by a qualified observer. Observer logs whether visible emissions are present and corrective actions taken. Visible records are kept on file.	Inspections and differential pressure readings are logged. Work orders are generated and maintenance activities are recorded and kept on file.

STATEMENT OF BASIS
 by
Kansas Department of Health and Environment
 for
Northern Sun Co., A Division of Archer Daniels Midland Company

Source ID: 1810018, Tracking No.: OP100330 v5.0
DRAFT, 2020

This statement of basis sets forth the legal and factual basis for the proposed permit conditions, including references to the applicable statutory or regulatory provisions. Determinations were made based upon the application submitted, file review and reasonable inquiry.

I. Facility Description

Northern Sun, a division of Archer Daniels Midland (ADM) company, operates an oilseed processing plant in Goodland, Kansas., that produces crude vegetable oil and meal from oilseeds.

Insignificant activities at the plant include: Fuel tanks, one (1) 572-gallon #2 fuel oil tank one (1) 250- gallon #2 fuel oil tank, one (1) 494-gallon #2 fuel oil tank, and one (1) 309-gallon gasoline tank.

II. Facility Emissions Summary

Pollutant	2018 Actual (tpy)	Potential (Uncontrolled, tpy)	Potential (Controlled, tpy)*
NO _x	7.29	53.94	53.94
VOC	76.23	1160.28	431.03
CO	6.00	37.67	37.67
SO ₂	0.06	12.40	12.40
PM (Condensable)	0.41	30,425.78	197.13
PM ₁₀ (Filterable)	7.17	4,990.86	163.76
PM _{2.5} (Filterable)	3.08	1.50	1.02
Pb (Lead)	N.A.	0.83	0.83
Total HAPs	48.41	740.87	274.86
Individual HAPs			
Hexane	48.41	740.82	274.81
Benzene	N.A.	1.76E-03	1.76E-03
Formaldehyde	N.A.	0.04	0.04

* N.A. not reported by the source in the SLEIS website.

III. Basis for permit renewal changes

A. Between last renewal and current renewal one construction approval was issued for a flat storage unit for wheat, C-14373, issued on July 16, 2018 and construction permit was

issued for Extractor, dated October 5, 2016, C-13548. Hence, the requirements and the project specific PTE (as relevant) were included in this renewal permit.

- B. Per 2020 PTE facility wide PTE was received and reviewed. None of the combustion devices have control efficiency and worst-case fuel scenarios was used for Boiler 1. The facility wide PTE is saved in KDHE records during this renewal. The major source for VOC and Hexane PTE emissions were from Exactor unit (EU-7) which is routed to a mineral scrubber control device to control VOC and Hexane emissions. Additionally, the facility has a “bubble limit” plant wide for VOC and HAPs stated in the operating permit.
- C. Permit wording has been updated to meet current standards.
- D. Facility wide requirements including opacity monitoring have been revised in accordance with current KDHE policy.

Applicable Requirements list

- | | | | | | |
|-------------------------------------|------------------|-------------------------------------|-------------------|-------------------------------------|----------------|
| <input type="checkbox"/> | NSR | <input checked="" type="checkbox"/> | NSPS (Part 60) | <input checked="" type="checkbox"/> | SIP |
| <input type="checkbox"/> | PSD (Part 52.21) | <input type="checkbox"/> | NESHAPS (Part 61) | <input checked="" type="checkbox"/> | MACT (Part 63) |
| <input checked="" type="checkbox"/> | CAM (Part 64) | <input type="checkbox"/> | Other_____ | | |

Miscellaneous

- Acid rain source
- Source subject to 112(r)
- Source applied for federally enforceable emissions cap
- Source provided terms for alternative operating scenarios
- Source requested case-by-case 112(g) or (j) determination
- Application proposes new control technology
- Certified by responsible official
- Diagrams or drawings included
- Confidential business information (CBI) included