Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: POET Biorefining – Iowa Falls, LLC
Facility Location: 21050 140th Street, Iowa Falls, Iowa 50126
Air Quality Operating Permit Number: 19-TV-005R1
Expiration Date: 11/25/2029
Permit Renewal Application Deadline: 5/25/2029

EIQ Number: 92-6959
Facility File Number: 42-01-019

Responsible Official
Name: Jim Schonert
Title: General Manager
Mailing Address: 21050 140th Street, Iowa Falls, Iowa 50126
Phone #: 641-630-1226
Email: Jim.Schonert@POET.com

Permit Contact Person for the Facility
Name: Matt Struck
Title: Senior EHS Specialist
Mailing Address: 21050 140th Street, Iowa Falls, Iowa 50126
Phone #: 641-630-1230
Email: Matt.Struck@POET.com

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein 11/26/2024

Marnie Stein, Supervisor of Air Operating Permits Section Date

Table of Contents

Abbreviations

acfm.....actual cubic feet per minute
bu/hr……bushels per hour
CFR.....Code of Federal Regulations
CE .....control equipment
CEM.....continuous emissions monitor
DDGS.....distillers dried grains with solubles
^{o}F.....degrees Fahrenheit
EIQ.....emissions inventory questionnaire
EP.....emission point
EU .....emission unit
gr./dscf .....grains per dry standard cubic foot
IAC.....Iowa Administrative Code
IDNR.....Iowa Department of Natural Resources
kW.....kilowatts
Mgals……. million gallons
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification System
NSPS .....new source performance standard
ppmv .....parts per million by volume
lb./hr .....pounds per hour
lb./MMBtu .....pounds per million British thermal units
SCC.....Source Classification Codes
scfm.....standard cubic feet per minute
SIC .....Standard Industrial Classification
tpy .....tons per year
USEPA.....United States Environmental Protection Agency

Pollutants
PM.....particulate matter
PM_{10} .....particulate matter ten microns or less in diameter
SO_2 .....sulfur dioxide
NO_x .....nitrogen oxides
VOC .....volatile organic compound
CO .....carbon monoxide
HAP.....hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: POET Biorefining – Iowa Falls, LLC
Permit Number: 19-TV-005R1

Facility Description: Industrial Organic Chemicals, NEC (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP S10	EU P10A	DDGS Dryer A	03-A-1313-S11
	EU P10B	DDGS Dryer B	
	EU B10A	Heat Recovery Boiler A	
	EU P50	Slurry Tank #1	
		Slurry Tank #2	
		Cook Tube #1	
		Cook Tube #2	
		Cook Flash Vessel #1	
		Cook Flash Vessel #2	
		Yeast Tank #1	
		Yeast Tank #2	
		Beer Column #1	
		Beer Column #2	
		Side Stripper #1	
		Side Stripper #2	
		Rectifier Column #1	
		Rectifier Column #2	
		190 Proof Condenser #1	
		190 Proof Condenser #2	
		Molecular Sieve Bottles #1 through #3	
		Molecular Sieve Bottles #4 through #6	
		Molecular Sieve Vaporizer #1	
		Molecular Sieve Vaporizer #2	
		200 Proof Condenser #1	
		200 Proof Condenser #2	
		Reflux Tank #1	
		Reflux Tank #2	
		Regen Tank #1	
		Regen Tank #2	
		200 Proof Flash Vessel #1	
		200 Proof Flash Vessel #2	
		CIP Screen	
		Acid Wash Tank	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
		Centrate Tank #1	
		Centrate Tank #2	
		Centrifuges	
		Evaporators	
	EU 64	Methanator #1	
	EU 65	Methanator #2	
	EU 66	Methanator #3	
	EU 67	Methanator #4	
EP S10B	EU P10C	DDGS Dryer C	05-A-238-S10
	EU P10D	DDGS Dryer D	
	EU B10B	Heat Recovery Boiler B	
	EU P50B	Slurry Tank #1	
		Slurry Tank #2	
		Cook Tube #1	
		Cook Tube #2	
		Cook Flash Vessel #1	
		Cook Flash Vessel #2	
		Yeast Tank #1	
		Yeast Tank #2	
		Beer Column #1	
		Beer Column #2	
		Side Stripper #1	
		Side Stripper #2	
		Rectifier Column #1	
		Rectifier Column #2	
		190 Proof Condenser #1	
		190 Proof Condenser #2	
		Molecular Sieve Bottles #1 through #3	
		Molecular Sieve Bottles #4 through #6	
		Molecular Sieve Vaporizer #1	
		Molecular Sieve Vaporizer #2	
		200 Proof Condenser #1	
		200 Proof Condenser #2	
		Reflux Tank #1	
		Reflux Tank #2	
		Regen Tank #1	
		Regen Tank #2	
		200 Proof Flash Vessel #1	
		200 Proof Flash Vessel #2	
		CIP Screen	
		Acid Wash Tank	
		Centrate Tank #1	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
		Centrate Tank #2	
		Centrifuges	
		Evaporators	
EP S160	EU 160	Auxiliary Boiler	20-A-351
EP S15	EU 01	Grain Receiving Pit #1	03-A-1314-S5
	EU 02	Grain Receiving Pit #2	
	EU 03	Receiving Elevator #1	
	EU 04	Receiving Elevator #2	
	EU 05	Scalping Bin	
EP S30	EU P30	Clean Grain Day Bin	03-A-1315-S6
	EU P31	Hammermill #1	
	EU P32	Hammermill #2	
	EU P33	Hammermill #3	
	EU P34	Hammermill #4	
	EU P35	Screw Conveyor #1	
	EU P36	Screw Conveyor #2	
EP S40	EU P40	Fermentation P40	03-A-1316-S12
EP S40B	EU P40B	Fermentation P40B	05-A-239-S7
EP S90	EU S90	DDGS Loading	03-A-1318-S1
EP S91	EU S91	DDGS Loading	06-A-647-S1
EP S70	EU P70	DDGS Cooler	03-A-1317-S5
EP S70B	EU P70B	DDGS Cooler	05-A-240-S4
EP F80	EU P80	Cooling Tower	05-A-241-S3
EP F80B	EU P80B	Cooling Tower	05-A-242-S3
EP T60A	EU T60A	Denatured Ethanol Storage Tank	06-A-357-S2
EP T60B	EU T60B	Denatured Ethanol Storage Tank	06-A-358-S2
EP T61	EU T61	Denatured Ethanol Storage Tank	03-A-1321-S3
EP T62	EU T62	Denatured Ethanol Storage Tank	03-A-1322-S3
EP T63	EU T63	200 Proof Ethanol Storage Tank	03-A-1323-S4
EP T65	EP T65	200 Proof Ethanol Storage Tank	03-A-1325-S4
EP T64	EU T64	Denaturant Storage Tank	03-A-1324-S3
EP T66	EU T66	190 Proof Ethanol Storage Tank	06-A-359-S2
EP F100	EU F100	Truck Traffic	06-A-361-S3
EP F90	EU F90	VOC Emissions from Equipment Leaks	06-A-360-S2
EP SEP22	EU SEP22	Truck Product Loadout	03-A-1320-S6
EP SEP22B	EU SEP22B	Rail Product Loadout	05-A-243-S6
EP S100	EU P100	Emergency Fire Pump	05-A-244-S3
EP S110A	EU 110A	Hammer Mill #5	19-A-674-S1
	EU 111A	Hammer Mill #6	
EP S120	EU S120	Grain Receiving Pit #3	16-A-329
	EU S121	Receiving Elevator #3	
EP S130	EU 130	Grain Bin #3	16-A-330

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP S140	EU 140	Grain Bin #4	16-A-331
EP F130	EU F130	WDGS Storage and Loadout	14-A-456-S1
EP F150	EU F150	Open Transportation Devices	14-A-457

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TS-8305	Corrosion Inhibitor Tank
TK-13500	Corn Oil Dump Tank
TK-13500	Corn Oil Reactor Tank
TR-13501	Corn Oil Agitator Tank
S100	Diesel Tank
TS-12501	Sulfuric Acid Tank
TF-6101	Whole Stillage Tank
TF-6810	Syrup Tank
TF-2101	Cook Water Tank
TF-6801	Thin Stillage Tank
TF-2401	Liquefaction Tank
TS-10502	Methanator Feed Tank
CP-1	Corn Pile #1
TK-2022	Corn Oil Extraction Feed Tank

II. Plant-Wide Conditions

Facility Name: POET Biorefining – Iowa Falls, LLC
Permit Number: 19-TV-005R1

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024 and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix D.

Permit Duration

The term of this permit is: 5 years
Commencing on: 11/26/2024
Ending on: 11/25/2029

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules24.115.

Emission Limits
Unless specified otherwise in the Source Specific Conditions, the following limitations and supporting regulations apply to all emission points at this plant:

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or

amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.
1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.
Authority for Requirement: 567 IAC 23.3(2)"c"

40 CFR 60 Subpart A Requirements
This facility is an affected source and these *General Provisions* apply to the facility. The affected units are EU B10A, EU B10B, EP T60A, EP T60B, EP T61, EP T62, EP T63, EP T64, EP T65 EP T66 and EU F90.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart Db Requirements
This facility is subject to Standards of Performance for *Industrial Commercial Institutional Steam Generating Units.* The affected units are EU B10A, EU B10B.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR 60 Subpart Db
567 IAC 23.1(2) "ccc"

40 CFR 60 Subpart Kb Requirements
This facility is subject to Standards of Performance for *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. The affected units are EP T60A, EP T60B, EP T61, EP T62, EP T64, EP T65 and EP T66.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR 60 Subpart Kb
567 IAC 23.1(2) "ddd"

40 CFR 60 Subpart VVa Requirements
This facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*. The affected units are equipment in VOC service and any applicable devices and systems (as defined in 40 CFR 60.481) in the entire facility. The owner or operator shall comply with the applicable requirements in 40 CFR 60.480 through 60.489, including recordkeeping requirements in 40 CFR 60.486 and reporting requirements in 40 CFR 60.487.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR 60 Subpart VVa
567 IAC 23.1(2) "nn"

40 CFR 63 Subpart A, General Provisions & 40 CFR 63 Subpart ZZZZ Requirements
This facility is subject to National Emission Standards for Hazardous Air Pollutants, Subpart A, General Provisions and National Emission Standards for Hazardous Air Pollutants *Stationary Reciprocating Internal Combustion Engines* (RICE NESHAP). The affected unit is EP S100. Applicable requirements are incorporated in the Emission Point-Specific conditions.
See Appendix for a link to the Standards.
Authority for Requirements: 567 IAC 23.1(4) "cz"
40 CFR 63 Subpart A
40 CFR 63 Subpart ZZZZ

III. Emission Point-Specific Conditions

Facility Name: POET Biorefining – Iowa Falls, LLC
Permit Number: 19-TV-005R1

Emission Point ID Number: EP S10

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Rated Capacity
EU P10A*	DDGS Dryer A	CE C10: Thermal Oxidizer 1	67.1 MMBtu/hr
EU P10B*	DDGS Dryer B		67.1 MMBtu/hr
EU B10A*	Heat Recovery Boiler A (TO/HRSG System 1)	None	147.4 MMBtu/hr
EU P50	Slurry Tank #1	CE C10: Thermal Oxidizer 1	17,716 Gallons
	Slurry Tank #2		16,000 Gallons
	Cook Tube #1		750 gpm
	Cook Tube #2		750 gpm
	Cook Flash Vessel #1		750 gpm
	Cook Flash Vessel #2		750 gpm
	Yeast Tank #1		18,000 Gallons
	Yeast Tank #2		17,000 Gallons
	Beer Column #1		800 gpm
	Beer Column #2		800 gpm
	Side Stripper #1		135 gpm
	Side Stripper #2		135 gpm
	Rectifier Column #1		160 gpm
	Rectifier Column #2		160 gpm
	190 Proof Condenser #1		500 gpm
	190 Proof Condenser #2		500 gpm
	Molecular Sieve Bottles #1 through #3		270 gpm
	Molecular Sieve Bottles #4 through #6		270 gpm
	Molecular Sieve Vaporizer #1		175 gpm
	Molecular Sieve Vaporizer #2		175 gpm
	200 Proof Condenser #1		135 gpm
	200 Proof Condenser #2		135 gpm
	Reflux Tank #1		600 Gallons
	Reflux Tank #2		600 Gallons
	Regen Tank #1		600 Gallons
	Regen Tank #2		600 Gallons
	200 Proof Flash Vessel #1		150 gpm
	200 Proof Flash Vessel #2		150 gpm
	CIP Screen		1,200 gpm
	Acid Wash Tank		2,200 Gallons
	Centrate Tank #1		990 Gallons
	Centrate Tank #2		990 Gallons
	Centrifuges		1,600 gpm
	Evaporators		400 gpm

* The Raw Material/Fuel for EU P10A, EU P10B and EU B10A is natural gas, process gas or biogas. The raw material(s) for all units of EU P50 is at least one of the following: Ethanol, mash, yeast, beer, whole or thin stillage, Centrate, CIP, acid wash, VOCs or HAPs.
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.
Emission Limits – New Source Performance Standards

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 0.1 lb/MMBtu(1)
Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db
(1) As indicated in 40 CFR §60.44b(h) and §60.44b(h)(i), compliance with this limit is determined on a 30-day rolling average basis and applies at all times, including periods of startup, shutdown, and malfunction. This limit applies to each individual steam generating unit, as defined in 40 CFR §60.41b.

EP S10 Only
Pollutant: Opacity
Emission Limit(s): 40%(2)
Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.3(2)"d"
(1)An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.85 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 3.85 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Pollutant: Sulfur Dioxide (SOx)
Emission Limit(s): 8.99 lb/hr, 500 ppm_v
Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 27.5 lb/hr(3)
Authority for Requirement: DNR Construction Permit 03-A-1313-S11
(3)The emission limit is based on a 30-day rolling average. Limit applies to all emissions from stacks S10 and S10B.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.35 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 10.74 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Pollutant: Acetaldehyde
Emission Limit(s): 0.23 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Pollutant: Single HAP
Emission Limit(s): 0.25 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Pollutant: Total HAP
Emission Limit(s): 0.84 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

Combined Emission Limit – TO/HRSGs and Auxiliary Boiler
Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 96.6 tons/yr[(4)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351
[(4)] The annual emission limit only applies to EU B10A/CE C10, EU B10B/CE 10B, and EU 160.

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 96.6 tons/yr[(4)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351
[(4)] The annual emission limit only applies to EU B10A/CE C10, EU B10B/CE 10B, and EU 160.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit. If differences in language are found between this permit and Subpart Db, the language specified in Subpart Db shall be considered correct.
B. The owner or operator shall operate the Thermal Oxidizer 1 (CE C10) at all times that process streams are being vented to the equipment.
C. During operation, the Thermal Oxidizer 1 (CE C10) shall maintain a temperature (3-hour average) of no less than 50 degrees Fahrenheit below the average temperature recorded

during the most recent performance test which demonstrated compliance with the emission limits.

a. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the Thermal Oxidizer. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
b. The owner or operator shall keep hourly records of the operating temperature of the Thermal Oxidizer and record all periods (during actual operations) where the 3-hour block average temperature is less than -50 degrees Fahrenheit than the average temperature observed during any performance test that demonstrated compliance at comparable operating conditions. This requirement shall not apply on the days the Thermal Oxidizer, or the equipment the Thermal Oxidizer controls, is not in operation

D. The DDGS Dryers (EU P10A and EU P10B) and the Thermal Oxidizer 1 (CE C10) shall combust only natural gas and/or process off-gases. The Waste Heat Recovery Boiler (EU B10A) shall not combust any supplemental fuel.
   a. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the thermal oxidizer/heat recovery boiler system during each day. In addition, the owner or operator shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. Per 40 CFR §60.41b, the annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
E. The plant-wide total amount of dried distillers grain with solubles (DDGS) produced shall not exceed 369,643 tons per twelve-month rolling period.
   a. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous month.
   b. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous twelve (12) months.
F. The owner or operator shall inspect and maintain the Thermal Oxidizer 1 (CE C10) according to the facility's (Plant No. 42-01-019) operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   a. The date any inspection and/or maintenance was performed on the control equipment;
   b. Any issues identified during the inspection;
   c. Any issues addressed during the maintenance activities; and,
   d. Identification of the staff member performing the maintenance or inspection.
G. As indicated in 40 CFR §60.46b(e)(3), the owner or operator shall demonstrate compliance with the emission limits for NO_X required in §60.44b (lb/MMBtu) on a

continuous basis through the use of a 30-day rolling average emission rate.

H. As indicated in 40 CFR §60.49b(g), the owner or operator shall maintain records of the following information for each steam generating unit operating day and it shall be submitted in a report, as required in 40 CFR §60.49b(i).
    a. Calendar date;
    b. The average hourly NOx emission (as NO_2) rates measured;
    c. The 30-day average NOx emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
    d. Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emission standard under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
    e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
    f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
    g. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
    h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
    i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
    j. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

I. The facility is required to monitor annual NOx emissions monthly and on a 12-month rolling basis to ensure compliance with the 96.6 tons/year limit. The owner or operator shall demonstrate compliance with the NOx lb/hr and tpy emissions limits, as specified in the emission limits listed above, in the following manner:
    a. NOx emissions shall be calculated using CEMS concentration readings (ppmv), Method 19, and fuel gas flow rate. The equations provided in Step 1 and Step 2 shall be used to calculate the NOx emission rate.

Step 1

$E = Cd \times Fd [20.9/(20.9 - O_2d)]$

Where E = pollutant emission rate in lb/MMBtu

Cd = pollutant concentration in lb/dscf

For NOx $Cd = ppmv \times 1.194 \times 10^{-7}$

Fd = Oxygen based F-factor in dscf/MMBtu (use 8710 for natural gas)

O_2d = oxygen content of stack gas on a dry basis

Step 2

Er = E (lb/MMBtu) x [Heat input per hour for TO + DDGS Dryers] (MMBtu/hr)

Where Er is emission rate calculated in lb/hr

Heat input per hour in MMBtu/hr is calculated as:

Fuel feed rate for TO and DDGS Dryers (cubic feet/hr x fuel heat content (MMBtu/cubic feet)

Fuel heat content value for natural gas will be based on 12-month rolling average of the facility's actual values.

b. The facility shall conduct annual Bias-Adjustment Tests (BAT)[1]. After each Bias-Adjustment test (BAT) facility shall use the following equation to calculate a percentage difference.

[(Er –BAT) x 100]/BAT = percentage difference = PD

1 + abs(PD/100) = adjustment factor = AF

c. The facility shall adjust the Er value calculated in Step 2 using the methodologies listed below.

i. After each BAT, the facility shall adjust the calculated Er values for NOx, if the percentage difference (PD) as calculated in I.b. is a negative value. If the percentage difference (PD) in I.b. is positive, facility shall not make any adjustment. Adjusted Er = Er * AF

ii. If adjustments are needed for more than one of the initial quarterly BATs, the total adjustment will be calculated as sum of the absolute value of the new percentage difference and the previous adjustment factor. If the percentage difference in I.b. is positive, facility shall not make any change to the adjustment factor. New adjustment factor = old adjustment factor + abs(PD)

iii. In subsequent years, during the annual BAT[1], the facility shall compare the adjusted Er value, in lb/hr, for NOx, as specified in I.a. Steps 1 and 2, with the BAT test result. The facility shall calculate a percentage difference using the equation specified in I.b. If the percentage difference shows that the facility is under-reporting (i.e. negative value), an adjustment will be made using the adjustment factor in I.b. and the adjusted Er equation in I.c.

iv. If any adjustment factors are utilized by the facility, the CEM quarterly report submission will include an explanation of the adjustment factor and start date for using this factor. The total adjustment factor utilized after completion of four consecutive quarterly BATs will be detailed in the annual tons per year report submitted to the department with the 4th Quarter CEM report. Adjustment factor information will also be included as part of the bias adjustment test report submission.

v. If the facility would like to remove or decrease the adjustment factor, four consecutive quarterly BATs will be completed per the procedures above and the adjustment factor (if necessary) will be recalculated per the procedures of this permit.

d. The facility shall calculate daily emissions in pounds per day, using the adjusted Er value as specified in I.a, b. and c.

e. Using the daily values in pounds per day, the facility shall convert the calculated values to tons per year (tpy), on a rolling 365-day basis. The tpy values shall be submitted to the department at the end of each year with the 4th quarter CEM report.
f. The Department shall evaluate compliance with tpy emissions limits listed above using the pound per day and ton per year results submitted by the facility for NOx each year.
g. The facility shall submit the following within 45-days of BAT test completion to the Department for four consecutive quarters:
    i. The BAT test result in lb/hr and the corresponding calculated Er value in lb/hr, as specified in I.a, b. and c., for the duration of the BAT test.
h. If the facility is unable to demonstrate that the facility's calculation, using Method 19, for four (4) consecutive quarters (out of the eight (8) consecutive quarters allotted for achieving compliance), is underreporting the Adjusted Er by less than 10.0% when compared to the BAT test results; then installation, calibration, maintenance and operation of a flow meter shall be required within six months to calculate lb/hr emission rate of NOx. This flow meter shall be capable of meeting EPA Performance Specification 6, (40 CFR Part 60, Appendix B).
i. The facility shall be required to submit quarterly reports for all pollutants monitored using the CEMS. The NOx emission rate, Er, included in these reports shall reflect any applicable adjustment factors. If an adjustment factor is applied to only a portion of the quarter, the cover letter to the CEM quarterly report will include the start date for the adjustment factor.
j. On a daily basis, the facility shall calculate and record the combined 30-day rolling average hourly NOx emissions, in pounds per hour, for EP S10 and EP S10B.

J. The permittee shall use the NOx CEM data, the natural gas fuel usage records, and the equation below to calculate and record the monthly NOx emissions from the TO/HRSGs and boiler EU 160. The permittee shall maintain records of all data used to perform the calculations:

a. $$NO_X\left(\frac{ton}{month}\right) = [S10_{NOx}] \times \left[\frac{1.2 \times NG_{TO/HRSG,A}}{(1.2 \times NG_{TO/HRSG,A}) + (NG_{Dryers,A,B})}\right] + [S10B_{NOx}] \times \left[\frac{1.2 \times NG_{TO/HRSG,B}}{(1.2 \times NG_{TO/HRSG,B}) + (NG_{Dryers,C,D})}\right] + 0.1 \times [NG_{160}] / 2000$$

Where: NOx (ton/month) = NOx from TO/HRSG (EU B10A and EU B10B) and Boiler (EU 160)

$S10_{NOx}$ = total NOx emissions from stack S10 as measured by the CEM, in tons

$NG_{TO/HRSG,A}$ = amount of natural gas combusted in the TO/HRSG (EU B10A) in mmBtu

$NG_{Dryers,A,B}$ = amount of natural gas combusted in the Dryers (EU P10A and EU P10B) in mmBtu

$S10B_{NOx}$ = total NOx emissions from stack S10B as measured by the CEM, in tons

$NG_{TO/HRSG,B}$ = amount of natural gas combusted in the TO/HRSG (EU B10B) in mmBtu

$NG_{Dryers,C,D}$ = amount of natural gas combusted in the Dryers (EU P10C and EU P10D) in mmBtu

1.2 = compliance margin

NOTE: The emission factor of 0.1 lb/MMBtu shall be replaced by the average of the result from the most recent stack test for EP S160.

K. The permittee shall use the equation in condition J to determine the 12-month rolling total emissions of NOx from the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B for each calendar month. The 12-month rolling total shall be calculated at the end of each month. As an alternative to the equation in J, the permittee may assume that all NOx emissions from stacks S10 and S10B are from the TO/HRSGs.

L. The permittee shall monitor the natural gas input to the dryers and the TO/HRSG separately.
   a. Record the amount of natural gas input to the dryers and the TO/HRSG in mmBtu/month.

M. The total amount of CO emitted at Plant Number 41-02-010 from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 shall not exceed 96.6 tons in any 12-month rolling period. The owner or operator shall:
   a. On a monthly basis, calculate and record the total amount of CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility during the previous month.
   b. On a monthly basis, calculate and record the rolling 12-month total amount of CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility.

N. The owner or operator shall calculate CO emissions from Heat Recovery Boiler A (TO/HRSG System 1) (EU B10A) using the following methodology:
   a. The owner or operator shall record the number of hours that Heat Recovery Boiler A (TO/HRSG System 1) (EU B10A) is operated on a daily basis.
      i. The owner or operator shall calculate CO emissions from Heat Recovery Boiler A (TO/HRSG System 1) (EU B10A) in tons per month by multiplying the allowable CO emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2000 pounds.

Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

[(1)]The initial BAT shall be completed quarterly to establish the adjustment factor (AF); then BAT shall be completed annually to retain the accuracy of the adjustment factor used by the facility. The annual BAT can be completed as part of the RATA process

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 125
Stack Opening (inches, dia.): 84
Exhaust Flow Rate (scfm): 71,700
Exhaust Temperature (°F): 350
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1313-S11

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Method
NO_x	CEMS	Continuous[(1)]	40 CFR 60, Appendix A, Method 7E
VOC	Stack Testing	Annual[(2)]	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
Total HAP	Stack Testing	Annual	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] Compliance shall be demonstrated continuously through the use of a Continuous Emissions Monitoring System (CEMS). Four quarterly Bias Adjustment Tests (BAT) shall be conducted in a 12-month period; with a minimum of 30 days between tests. The emission rate shall be measured in pounds/hour using the following test method: 40 CFR 60, Appendix A, Methods 1 - 4, Method 7E. BATs shall be conducted while the unit is operating, at a minimum, of at least 80% of historical maximum rated capacity demonstrated by the facility.

[2] Annual stack testing shall be conducted for VOC, Total HAP, and Single HAP. Acrolein, acetaldehyde, formaldehyde, and methanol shall be tested for specifically. The specified HAP compounds that test below detection limits shall be assumed to be emitting at a rate equal to the detection limit.

Continuous Emission Monitoring Systems (CEMS)

A. The following requirements shall apply to all CEMS for NSPS emission standards in this permit:
   i. The owner or operator shall demonstrate compliance with the nitrogen oxide emission through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to

meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.

ii. The 1-hour average NO_X emission rates measured by the NO_X CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).

iii. Per 40 CFR 60.49b(f), when NO_X emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days

iv. The NO_x CEMS shall be operated and data collected as required under 40 CFR §60.48b(c), (d), (e), and (f).

B. The following requirements shall apply to all CEMS for non-NSPS emission standards in this permit:

i. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission units associated with EP S10, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.

ii. The 1-hour average NO_x emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.

iii. For each hour of missing emission data (NOx), the owner or operator shall substitute data by:

a) If the monitor data availability is equal to or greater than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period greater than 24 hours, substitute the greater of:

- The 90^{th} percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

b) If the monitor data availability is at least 90.0% but less than 95.0%, the permittee shall calculate substitute data by means of the automated data

acquisition and handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period of more than 8 hours, substitute the greater of:

- The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentration recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

c) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

C. The applicable requirements in Appendix F to Part 60 – *Quality Assurance Procedures* shall apply to all CEMS used for determination of compliance with the applicable emission limits in this permit, including:

i. The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

a) Calibration of the CEMS;
b) Calibration drift determination and adjustment of the CEMS;
c) Preventive maintenance of the CEMS (including spare parts inventory);
d) Data recording, calculations, and reporting;
e) Accuracy audit procedures including sampling and analysis methods; and,
f) Program of corrective action for malfunctioning CEMS.

ii. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

iii. The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.

The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see Condition 8 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 03-A-1313-S11
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

Stack Testing:

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

Pollutant – PM_{10}
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
The requirements of the Operational Limits & Reporting/Record keeping satisfy the requirements for CAM.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S10B

Associated Equipment

Emission Unit ID	Emission Unit Name	Control Equipment	Maximum Rated Capacity
EU P10C*	DDGS Dryer C	Thermal Oxidizer 2 (CE C10B)	54.4 MMBtu/hr
EU P10D*	DDGS Dryer D		54.4 MMBtu/hr
EU B10B*	Heat Recovery Boiler B (TO/HRSG System 2)	None	122 MMBtu/hr
EU P50B	Slurry Tank #1	Thermal Oxidizer 2 (CE C10B)	17,716 Gallons
	Slurry Tank #2		16,000 Gallons
	Cook Tube #1		750 gpm
	Cook Tube #2		750 gpm
	Cook Flash Vessel #1		750 gpm
	Cook Flash Vessel #2		750 gpm
	Yeast Tank #1		18,000 Gallons
	Yeast Tank #2		17,000 Gallons
	Beer Column #1		800 gpm
	Beer Column #2		800 gpm
	Side Stripper #1		135 gpm
	Side Stripper #2		135 gpm
	Rectifier Column #1		160 gpm
	Rectifier Column #2		160 gpm
	190 Proof Condenser #1		500 gpm
	190 Proof Condenser #2		500 gpm
	Molecular Sieve Bottles #1 through #3		270 gpm
	Molecular Sieve Bottles #4 through #6		270 gpm
	Molecular Sieve Vaporizer #1		175 gpm
	Molecular Sieve Vaporizer #2		175 gpm
	200 Proof Condenser #1		135 gpm
	200 Proof Condenser #2		135 gpm
	Reflux Tank #1		600 Gallons
	Reflux Tank #2		600 Gallons
	Regen Tank #1		600 Gallons
	Regen Tank #2		600 Gallons
	200 Proof Flash Vessel #1		150 gpm
	200 Proof Flash Vessel #2		150 gpm
	CIP Screen		1,200 gpm
	Acid Wash Tank		2,200 Gallons
	Centrate Tank #1		990 Gallons
	Centrate Tank #2		990 Gallons
	Centrifuges		1,600 gpm
	Evaporators		400 gpm

Authority for Requirement: DNR Construction Permit 05-A-238-S10

* The Raw Material/Fuel for EU 10C, EU 10D and EU 10B is natural gas, process gas or biogas. The raw material for all units of EU P50B is at least one of the following: Ethanol, mash, yeast, beer, whole or thin stillage, Centrate, CIP, acid wash, VOCs or HAPs.

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Emission Limits – New Source Performance Standards

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 0.1 lb/MMBtu(1)
Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

(1) As indicated in 40 CFR §60.44b(h) and §60.44b(h)(i), compliance with this limit is determined on a 30-day rolling average basis and applies at all times, including periods of startup, shutdown, and malfunction. This limit applies to each individual steam generating unit, as defined in 40 CFR §60.41b.

EP S10B Only
Pollutant: Opacity
Emission Limit(s): 40%(2)
Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.3(2)"d"

(1)An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.85 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 3.85 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Pollutant: Sulfur Dioxide (SOx)
Emission Limit(s): 8.99 lb/hr, 500 ppm_v
Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 27.5 lb/hr(3)
Authority for Requirement: DNR Construction Permit 05-A-238-S10

(3)The emission limit is based on a 30-day rolling average. Limit applies to all emissions from stacks S10 and S10B.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.35 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 10.74 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Pollutant: Acetaldehyde
Emission Limit(s): 0.23 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Pollutant: Single HAP
Emission Limit(s): 0.25 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Pollutant: Total HAP
Emission Limit(s): 0.84 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-238-S10

Combined Emission Limit – TO/HRSGs and Auxiliary Boiler
Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 96.6 tons/yr[(4)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 96.6 tons/yr[(4)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351

[(4)] The annual emission limit only applies to EU B10A/CE C10, EU B10B/CE 10B, and EU 160.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit. If differences in language are found between this permit and Subpart Db, the language specified in Subpart Db shall be considered correct.
B. The owner or operator shall operate the Thermal Oxidizer 2 (CE C10B) at all times that process streams are being vented to the equipment.
C. During operation, the Thermal Oxidizer 2 (CE C10B) shall maintain a temperature (3-hour average) of no less than 50 degrees Fahrenheit below the average temperature

recorded during the most recent performance test which demonstrated compliance with the emission limits.

a. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the Thermal Oxidizer. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
b. The owner or operator shall keep hourly records of the operating temperature of the Thermal Oxidizer and record all periods (during actual operations) where the 3-hour block average temperature is less than -50 degrees Fahrenheit than the average temperature observed during any performance test that demonstrated compliance at comparable operating conditions. This requirement shall not apply on the days the Thermal Oxidizer, or the equipment the Thermal Oxidizer controls, is not in operation

D. The DDGS Dryers (EU P10C and EU P10D) and the Thermal Oxidizer 2 (CE C10B) shall combust only natural gas and/or process off-gases. The Waste Heat Recovery Boiler (EU B10B) shall not combust any supplemental fuel.
   a. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the thermal oxidizer/heat recovery boiler system during each day. In addition, the owner or operator shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. Per 40 CFR §60.41b, the annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
E. The plant-wide total amount of dried distillers grain with solubles (DDGS) produced shall not exceed 369,643 tons per twelve-month rolling period.
   a. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous month.
   b. By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous twelve (12) months.
F. The owner or operator shall inspect and maintain the Thermal Oxidizer 2 (CE C10B) according to the facility's (Plant No. 42-01-019) operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   a. The date any inspection and/or maintenance was performed on the control equipment;
   b. Any issues identified during the inspection;
   c. Any issues addressed during the maintenance activities; and,
   d. Identification of the staff member performing the maintenance or inspection.
G. As indicated in 40 CFR §60.46b(e)(3), the owner or operator shall demonstrate compliance with the emission limits for NO_X required in §60.44b (lb/MMBtu) on a

continuous basis through the use of a 30-day rolling average emission rate.

H. As indicated in 40 CFR §60.49b(g), the owner or operator shall maintain records of the following information for each steam generating unit operating day and it shall be submitted in a report, as required in 40 CFR §60.49b(i).
    a. Calendar date;
    b. The average hourly NOx emission (as NO_2) rates measured;
    c. The 30-day average NOx emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
    d. Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the NOx emission standard under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
    e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
    f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
    g. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
    h. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
    i. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
    j. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

I. The facility is required to monitor annual NOx emissions monthly and on a 12-month rolling basis to ensure compliance with the 96.6 tons/year limit. The owner or operator shall demonstrate compliance with the NOx lb/hr and tpy emissions limits, as specified in the emission limit section above, in the following manner:
    a. NOx emissions shall be calculated using CEMS concentration readings (ppmv), Method 19, and fuel gas flow rate. The equations provided in Step 1 and Step 2 shall be used to calculate the NOx emission rate.

Step 1

$E = Cd \times Fd [20.9/(20.9 - O_2d)]$

Where E = pollutant emission rate in lb/MMBtu

Cd = pollutant concentration in lb/dscf

For NOx $Cd = ppmv \times 1.194 \times 10^{-7}$

Fd = Oxygen based F-factor in dscf/MMBtu (use 8710 for natural gas)

O_2d = oxygen content of stack gas on a dry basis

Step 2

Er = E (lb/MMBtu) x [Heat input per hour for TO + DDGS Dryers] (MMBtu/hr)

Where Er is emission rate calculated in lb/hr

Heat input per hour in MMBtu/hr is calculated as:

Fuel feed rate for TO and DDGS Dryers (cubic feet/hr x fuel heat content (MMBtu/cubic feet)

Fuel heat content value for natural gas will be based on 12-month rolling average of the facility's actual values.

b. The facility shall conduct annual Bias-Adjustment Tests (BAT)[1]. After each Bias-Adjustment test (BAT) facility shall use the following equation to calculate a percentage difference.

[(Er –BAT) x 100]/BAT = percentage difference = PD

1 + abs(PD/100) = adjustment factor = AF

c. The facility shall adjust the Er value calculated in Step 2 using the methodologies listed below.

i. After each BAT, the facility shall adjust the calculated Er values for NOx, if the percentage difference (PD) as calculated in I.b. is a negative value. If the percentage difference (PD) in I.b. is positive, facility shall not make any adjustment. Adjusted Er = Er * AF

ii. If adjustments are needed for more than one of the initial quarterly BATs, the total adjustment will be calculated as sum of the absolute value of the new percentage difference and the previous adjustment factor. If the percentage difference in I.b. is positive, facility shall not make any change to the adjustment factor. New adjustment factor = old adjustment factor + abs(PD)

iii. In subsequent years, during the annual BAT[1], the facility shall compare the adjusted Er value, in lb/hr, for NOx, as specified in I.a. Steps 1 and 2, with the BAT test result. The facility shall calculate a percentage difference using the equation specified in I.b. If the percentage difference shows that the facility is under-reporting (i.e. negative value), an adjustment will be made using the adjustment factor in I.b. and the adjusted Er equation in I.c.

iv. If any adjustment factors are utilized by the facility, the CEM quarterly report submission will include an explanation of the adjustment factor and start date for using this factor. The total adjustment factor utilized after completion of four consecutive quarterly BATs will be detailed in the annual tons per year report submitted to the department with the 4th Quarter CEM report. Adjustment factor information will also be included as part of the bias adjustment test report submission.

v. If the facility would like to remove or decrease the adjustment factor, four consecutive quarterly BATs will be completed per the procedures above and the adjustment factor (if necessary) will be recalculated per the procedures of this permit.

d. The facility shall calculate daily emissions in pounds per day, using the adjusted Er value as specified in I.a, b. and c.

e. Using the daily values in pounds per day, the facility shall convert the calculated values to tons per year (tpy), on a rolling 365-day basis. The tpy values shall be submitted to the department at the end of each year with the 4th quarter CEM report.
f. The Department shall evaluate compliance with tpy emissions limits listed above using the pound per day and ton per year results submitted by the facility for NOx each year.
g. The facility shall submit the following within 45-days of BAT test completion to the Department for four consecutive quarters:
    i. The BAT test result in lb/hr and the corresponding calculated Er value in lb/hr, as specified in I.a, b. and c., for the duration of the BAT test.
h. If the facility is unable to demonstrate that the facility's calculation, using Method 19, for four (4) consecutive quarters (out of the eight (8) consecutive quarters allotted for achieving compliance), is underreporting the Adjusted Er by less than 10.0% when compared to the BAT test results; then installation, calibration, maintenance and operation of a flow meter shall be required within six months to calculate lb/hr emission rate of NOx. This flow meter shall be capable of meeting EPA Performance Specification 6, (40 CFR Part 60, Appendix B).
i. The facility shall be required to submit quarterly reports for all pollutants monitored using the CEMS. The NOx emission rate, Er, included in these reports shall reflect any applicable adjustment factors. If an adjustment factor is applied to only a portion of the quarter, the cover letter to the CEM quarterly report will include the start date for the adjustment factor.
j. On a daily basis, the facility shall calculate and record the combined 30-day rolling average hourly NOx emissions, in pounds per hour, for EP S10 and EP S10B.

J. The permittee shall use the NOx CEM data, the natural gas fuel usage records, and the equation below to calculate and record the monthly NOx emissions from the TO/HRSGs and boiler EU 160. The permittee shall maintain records of all data used to perform the calculations:

a. $$NO_X\left(\frac{ton}{month}\right) = [S10_{NOx}] \times \left[\frac{1.2 \times NG_{TO/HRSG,A}}{(1.2 \times NG_{TO/HRSG,A}) + (NG_{Dryers,A,B})}\right] + [S10B_{NOx}] \times \left[\frac{1.2 \times NG_{TO/HRSG,B}}{(1.2 \times NG_{TO/HRSG,B}) + (NG_{Dryers,C,D})}\right] + 0.1 \times [NG_{160}] / 2000$$

Where: NOx (ton/month) = NOx from TO/HRSG (EU B10A and EU B10B) and Boiler (EU 160)

$S10_{NOx}$ = total NOx emissions from stack S10 as measured by the CEM, in tons

$NG_{TO/HRSG,A}$ = amount of natural gas combusted in the TO/HRSG (EU B10A) in mmBtu

$NG_{Dryers,A,B}$ = amount of natural gas combusted in the Dryers (EU P10A and EU P10B) in mmBtu

$S10B_{NOx}$ = total NOx emissions from stack S10B as measured by the CEM, in tons

$NG_{TO/HRSG,B}$ = amount of natural gas combusted in the TO/HRSG (EU B10B) in mmBtu

$NG_{Dryers,C,D}$ = amount of natural gas combusted in the Dryers (EU P10C and EU P10D) in mmBtu

1.2 = compliance margin

NOTE: The emission factor of 0.1 lb/MMBtu shall be replaced by the average of the result from the most recent stack test for EP S160.

K. The permittee shall use the equation in condition J to determine the 12-month rolling total emissions of NOx from the fossil fuel fired boilers EU B10A/CE C10 and EU B10B/CE C10B for each calendar month. The 12-month rolling total shall be calculated at the end of each month. As an alternative to the equation in J, the permittee may assume that all NOx emissions from stacks S10 and S10B are from the TO/HRSGs.

L. The permittee shall monitor the natural gas input to the dryers and the TO/HRSG separately.
   a. Record the amount of natural gas input to the dryers and the TO/HRSG in mmBtu/month.

M. The total amount of CO emitted at Plant Number 41-02-010 from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 shall not exceed 96.6 tons in any 12-month rolling period. The owner or operator shall:
   a. On a monthly basis, calculate and record the total amount of CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility during the previous month.
   b. On a monthly basis, calculate and record the rolling 12-month total amount of CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility.

N. The owner or operator shall calculate CO emissions from Heat Recovery Boiler B (TO/HRSG System 2) (EU B10B) using the following methodology:
   a. The owner or operator shall record the number of hours that Heat Recovery Boiler B (TO/HRSG System 2) (EU B10B) is operated on a daily basis.
      i. The owner or operator shall calculate CO emissions from Heat Recovery Boiler B (TO/HRSG System 2) (EU B10B) in tons per month by multiplying the allowable CO emission rate listed in the emission limits above by the number of hours the emission source operated during the month divided by 2000 pounds.

Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

[1] The initial four quarterly BAT have been completed by the facility. BAT shall be completed annually to retain the accuracy of the adjustment factor used by the facility. The annual BAT can be completed as part of the RATA process.

Compliance Plan
The owner/operator of this equipment shall comply with following compliance plan.

Description
Stack testing completed July 26, 2024 shows that this emission point was unable to demonstrate compliance with the applicable VOC emission limit.

Condition
As stated in the compliance plan received by the Department on October 10, 2024, the permittee shall submit a construction permit modification application requesting an increase to the VOC emission limit to the DNR by October 25, 2024. The construction permit modification was submitted October 23, 2024.

Authority for Requirement: 567 IAC 24.108(15)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 125
Stack Opening (inches, dia.): 84
Exhaust Flow Rate (scfm): 68,300
Exhaust Temperature (°F): 337
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-238-S10

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
NO_x	CEMS	Continuous	Footnote [1]	40 CFR 60, Appendix A, Method 7E
VOC	Stack Testing	Annual	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP	Stack Testing	Annual[2]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] Compliance shall be demonstrated continuously through the use of a Continuous Emissions Monitoring System (CEMS). Four quarterly Bias Adjustment Tests (BAT) shall be conducted in a 12-month period; with a minimum of

30 days between tests. The emission rate shall be measured in pounds/hour using the following test method: 40 CFR 60, Appendix A, Methods 1 - 4, Method 7E. BATs shall be conducted while the unit is operating, at a minimum, of at least 80% of historical maximum rated capacity demonstrated by the facility.
(2) Annual stack testing shall be conducted for VOC, Total HAP, and Single HAP. Acrolein, acetaldehyde, formaldehyde, and methanol shall be tested for specifically. The specified HAP compounds that test below detection limits shall be assumed to be emitting at a rate equal to the detection limit.

Continuous Emission Monitoring Systems (CEMS)

A. The following requirements shall apply to all CEMS for NSPS emission standards in this permit:
   i. The owner or operator shall demonstrate compliance with the nitrogen oxide emission through the use of a continuous emission monitoring system (CEMS). The owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring nitrogen oxides emissions discharged from the emission point to the atmosphere. The CEM shall be installed, evaluated, operated and data collected to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2). The specifications of 40 CFR 60, Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with the dates of the quarterly cylinder gas audits and annual relative accuracy test audit.
   ii. The 1-hour average NOx emission rates measured by the NOx CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).
   iii. Per 40 CFR 60.49b(f), when NOx emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days
   iv. The NO_x CEMS shall be operated and data collected as required under 40 CFR §60.48b(c), (d), (e), and (f).

B. The following requirements shall apply to all CEMS for non-NSPS emission standards in this permit:
   i. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission units associated with EP S10, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.
   ii. The 1-hour average NO_x emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.
   iii. For each hour of missing emission data (NOx), the owner or operator shall substitute data by:
      a) If the monitor data availability is equal to or greater than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and

handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period greater than 24 hours, substitute the greater of:

- The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

b) If the monitor data availability is at least 90.0% but less than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:

(i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

(ii) For a missing data period of more than 8 hours, substitute the greater of:

- The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 720 quality-assured monitor operating hours; or,
- The average of the hourly concentration recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.

c) If the monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

C. The applicable requirements in Appendix F to Part 60 – *Quality Assurance Procedures* shall apply to all CEMS used for determination of compliance with the applicable emission limits in this permit, including:

i. The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:

a) Calibration of the CEMS;
b) Calibration drift determination and adjustment of the CEMS;
c) Preventive maintenance of the CEMS (including spare parts inventory);
d) Data recording, calculations, and reporting;
e) Accuracy audit procedures including sampling and analysis methods; and,
f) Program of corrective action for malfunctioning CEMS.

ii. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.

iii. The owner or operator shall keep on-site a copy of these written procedures and

shall make them available for inspection by the Department.

The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see Condition 8 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 05-A-238-S10
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

Stack Testing:

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

Pollutant – PM_{10}
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
The requirements of the Operational Limits & Reporting/Record keeping satisfy the requirements for CAM.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S160

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU 160	Natural Gas Fired Auxiliary Boiler	Natural Gas	40.19 MMBtu/hr	20-A-351

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 20-A-351
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Material (PM)
Emission Limit(s): 0.30 lb/hr, 0.6 lb/MMBtu
Authority for Requirement: DNR Construction Permit 20-A-351
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppm_v
Authority for Requirement: DNR Construction Permit 20-A-351
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 0.1 lb/MMBtu
Authority for Requirement: DNR Construction Permit 20-A-351

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.084 lb/MMBtu
Authority for Requirement: DNR Construction Permit 20-A-351

Combined Emission Limits – TO/HRSGs and Boilers
Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): 96.6 tons/yr[(2)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351

[(2)]The annual emission limit only applies to EU B10A/CE C10, EU B10B/CE 10B, and EU 160.

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 96.6 tons/yr[(2)]
Authority for Requirement: DNR Construction Permit 03-A-1313-S11, 05-A-238-S10, 20-A-351

[(2)]The annual emission limit only applies to EU B10A/CE C10, EU B10B/CE 10B, and EU 160.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall operate, inspect, and maintain the boiler, Auxiliary Boiler (EU 160), according to the Facility's Operation and Maintenance (O&M) plan. The facility shall maintain a log of all maintenance and inspection activities performed on the emission unit. This log shall include, but is not limited to:
    a. The date any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
    c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.
B. The Auxiliary Boiler (EU 160) shall be restricted to combust only natural gas.
    a. As specified in 40 CFR Part 60 §60.48c(g)(2), the owner or operator shall record and maintain records of the amount of each fuel combusted during each calendar month.
C. The total amount of NO_X emitted at Plant Number 42-01-019 from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 shall not exceed 96.6 tons in any 12-month rolling period. The total amount of CO emitted at Plant Number 41-02-010 from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 shall not exceed 96.6 tons in any 12-month rolling period. The owner or operator shall:
    a. On a monthly basis, calculate and record the total amount of NO_X and CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility during the previous month.
    b. On a monthly basis, calculate and record the rolling 12-month total amount of NO_X and CO emissions, in tons, from fossil fuel fired boilers EU B10A/CE C10, EU B10B/CE C10B, and EU 160 at this facility.
D. The owner or operator shall calculate NO_X and CO emissions from Auxiliary Boiler (EU 160) using the following methodology:
    a. The owner or operator shall record the heating value of natural gas combusted by Auxiliary Boiler (EU 160) in million British Thermal Units (MMBtu) on a daily basis.
        i. The owner or operator shall calculate NO_X emissions from Auxiliary Boiler (EU 160) in tons per month by multiplying the heating value of natural gas combusted in million British Thermal Units (MMBtu) during the month by the emission factor of 0.1 lb/MMBtu, divided by 2000 pounds. The emission factor of 0.1 lb/MMBtu shall be replaced by the average of the result from the most recent stack test.

ii. The owner or operator shall calculate CO emissions from Auxiliary Boiler (EU 160) in tons per month by multiplying the heating value of the fuel combusted in million British Thermal Units (MMBtu) during the month by the emission factor of 0.084 lb/MMBtu, divided by 2000 pounds. The emission factor of 0.084 lb/MMBtu shall be replaced by the average of the result from the most recent stack test.

Authority for Requirement: DNR Construction Permit 20-A-351
567 IAC 23.1(2)"lll"
40 CFR 60 Subpart Dc

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 33
Stack Opening, (inches, dia.): 32
Exhaust Flow Rate (scfm): 14,726
Exhaust Temperature (°F): 300
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 20-A-351

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
NO_x	Stack Test	5 years	1 hour	40 CFR 60, Appendix A, Method 7E
CO	Stack Test	5 years	1 hour	40 CFR 60, Appendix A, Method 10

*Previous test was completed on 12/10/2021.

Authority for Requirement: DNR Construction Permit 20-A-351

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S15

Associated Equipment

EU ID	Description	Control Equipment	Raw Material	Maximum Rated Capacity	Construction Permit
01	Grain Receiving Pit #1	CE C15: Baghouse	Grain	30,000 bu/hr	03-A-1314-S5
02	Grain Receiving Pit #2			15,000 bu/hr	
03	Receiving Elevator #1			15,000 bu/hr	
04	Receiving Elevator #2			15,000 bu/hr	
05	Scalping Bin			16,550 bushels	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-1314-S5
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.97 lb/hr, 17.13 tons/yr[(2)], 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1314-S5
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 7.12 tons/yr[(2)]
Authority for Requirement: DNR Construction Permit 03-A-1314-S5

Pollutant: $PM_{2.5}$
Emission Limit(s): 4.73 tons/yr[(2)]
Authority for Requirement: DNR Construction Permit 03-A-1314-S5

[(2)]This limit applies to grain receiving and includes emissions from EP S15 and uncaptured emissions from grain receiving, assuming that 5% of emissions are uncaptured.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The facility shall not receive more than 481,800,000 bushels of grain in any rolling 12-month period. The owner or operator shall:
    a. On a monthly basis, record the total amount grain received at the facility, in bushels; and
    b. On a monthly basis, calculate and record the rolling 12-month total, in bushels.
B. The owner or operator shall maintain the Baghouse (CE C15) according to the facility's operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C15). This log shall include, but is not necessarily limited to:
    a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C15);
    b. Any issues identified during the inspection and the date each issue was resolved;
    c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1314-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 40
Stack Opening (inches, dia.): 30
Exhaust Flow Rate (scfm): 29,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1314-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S30

Associated Equipment

EU ID	Description	Control Equipment	Raw Material	Maximum Rated Capacity	Construction Permit
EU P30	Clean Grain Day Bin	CE C30: Baghouse	Grain	7,500 bushels	03-A-1315-S6
EU P31	Hammermill #1			1,250 bu/hr	
EU P32	Hammermill #2			1,250 bu/hr	
EU P33	Hammermill #3			1,250 bu/hr	
EU P34	Hammermill #4			1,250 bu/hr	
EU P35	Screw Conveyor #1			3,000 bu/hr	
EU P36	Screw Conveyor #2			3,000 bu/hr	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-1315-S6
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.12 lb/hr: 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1315-S6
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall operate and maintain the Baghouse (CE C30) according to the facility's operation and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE-C30). This log shall include, but is not necessarily limited to:
    a. The date any inspection and/or maintenance was performed on the Baghouse (CE C30);
    b. Any issues identified during the inspection;
    c. Any issues addressed during the maintenance activities; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1315-S6

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 40
Stack Opening (inches, dia.): 30
Exhaust Flow Rate (scfm): 14,210
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1315-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S40 & EP S40B

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP S40	EU P40	Fermenters #1- #7 (730,000 gallons each)	CE C40: Wet Scrubber	Ethanol	1,434 gallons per min (beer feed rate)	03-A-1316-S12
EP S40B		Beer Well (985,000 gallons)	CE C40B: Wet Scrubber			05-A-239-S11

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Combined Emission Limits
Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 20.00 lb/hr, 1,372 lb/hr[(1)]
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

Pollutant: Acetaldehyde
Emission Limit(s): 0.90 lb/hr, 40 lb/hr[(1)]
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

Pollutant: Single HAP – Not included Acetaldehyde
Emission Limit(s): 0.36 lb/hr, 0.58 lb/hr[(1)]
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

Pollutant: Total HAP
Emission Limit(s): 2.10 lb/hr, 41 lb/hr[(1)]
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

[(1)]Applies under the Scrubber Bypass Operating Scenario.

The following emission limits shall not be exceeded per emission point:
Pollutant: Opacity
Emission Limit(s): 40%[(2)]
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11
567 IAC 23.3(2)"d"

[(2)]An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.26 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. For each month of operation, the facility shall operate the scrubbers according to the parameters (total water flow rate, process water flow rate, additive feed rate, and process water temperature) that it established during the seasonal performance testing required in Construction Permits 03-A-1316-S12 and 05-A-239-S11 **Table 2 - Compliance Demonstrations – Full Rate Scrubber Operation** or **Table 1 - Compliance Demonstrations – Reduced Rate Scrubber Operation** to demonstrate compliance with the permitted emission limits listed above.

Table 1 – Permitted Monthly Scrubber Operating Parameters as Allowed by Season Tested

Season Tested	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Summer (testing shall be conducted in June, July or August)	X	X	X	X	X	X	X	X	X	X	X	X
Winter (testing allowed in any month from October through April)	X	X	X	X						X	X	X

B. The owner or operator may operate Wet Scrubber C40 and/or Wet Scrubber C40B at a reduced rate during periods when the owner or operator is performing maintenance activities or when market conditions arise.
   (1) The owner or operator shall record the date, time, and current scenario (full rate scrubber operation or reduced rate scrubber operation) under which the fermentation process is operating each time the fermentation process switches to a different scenario.
   (2) During reduced rate performance testing, the beer feed rate shall be maintained at below 90% of the maximum (normal) operating rate.
      a. During periods of reduced rate scrubber operation, the beer feed rate shall not exceed the average beer feed rate observed during the most recent reduced rate performance test that demonstrated compliance with the VOC and HAP emission limits in this permit.
         i. During periods of reduced rate scrubber operation, the owner or operator

shall maintain records of the average beer feed rate, based on a 3-hour block average, for each day of reduced rate scrubber operation.

ii. If a 3-hour block average beer feed rate exceeds the average beer feed rate observed during the most recent reduced rate performance test that demonstrated compliance with the VOC and HAP emission limits in this permit, the owner or operator shall adjust the water flow rate and the additive feed rate to those of the most recent full rate performance test that demonstrated compliance with the VOC and HAP emission limits in this permit.

C. The owner or operator shall maintain an average differential pressure drop across Wet Scrubber C40 and Wet Scrubber C40B that is between 0.25- and 11.8-inches water column, based on a 12-hour block averaging period. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across Wet Scrubber C40 and C40B that is outside the range of 0.25 to 11.8-inches water column.

(1) The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the pressure drop (in inches water column) across Wet Scrubber C40 and Wet Scrubber C40B. This equipment shall be installed, operated, and maintained in accordance with the Department approved facility's Operation and Maintenance (O&M) Plan.

(2) The owner or operator shall collect and record the pressure drop (in inches water column) across Wet Scrubber C40 and Wet Scrubber C40B at a minimum of once every 15 minutes and calculate and record the 12-hour block average. The 12-hour block average differential pressure drop for Wet Scrubber C40 and Wet Scrubber C40B shall be calculated using all data points collected during the averaging period.

(3) If the 12-hour differential pressure drop (in inches water column) block average across Wet Scrubber C40 and Wet Scrubber C40B falls outside the required range, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the 12-hour block average differential pressure drop is back within the required range.

(4) The requirements in Conditions C.(1) through C.(3) shall not apply on days that Wet Scrubber C40 and/or Wet Scrubber C40B or the equipment that the scrubber controls is not in operation.

D. The owner or operator shall maintain a 3-hour block average total water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B at or above the average rate observed during the most recent performance test that demonstrated compliance with the VOC and HAP limits in this permit.

(1) The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the total water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B. This equipment shall be installed, operated, and maintained in accordance with the Department approved facility's O&M Plan.

(2) The owner or operator shall collect and record the total water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B at a minimum of once every 15 minutes and calculate and record the 3-hour block average. The 3-hour block average total water flow rate for Wet Scrubber C40 and Wet Scrubber C40B shall be calculated using all data points collected during the averaging period.

(3) If any of the total water flow rate (in gallons per minute) 3-hour block averages for Wet Scrubber C40 or Wet Scrubber C40B falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average total water flow rate is back at or above the minimum required value.
(4) The requirements in Conditions D.(1) through D.(3) shall not apply on days that Wet Scrubber C40 and/or Wet Scrubber C40B or the equipment that this scrubber controls is not in operation.

E. The owner or operator shall maintain a 3-hour block average process water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B at or below the average rate observed during the most recent performance test that demonstrated compliance with the VOC and HAP limits in this permit.
(1) The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the process water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B. This equipment shall be installed, operated, and maintained in accordance with the Department approved facility's O&M Plan.
(2) The owner or operator shall collect and record the process water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B at a minimum of once every 15 minutes and calculate and record the 3-hour block average. The 3-hour block average process water flow rate for Wet Scrubber C40 and Wet Scrubber C40B shall be calculated using all data points collected during the averaging period.
(3) If any of the process water flow rate (in gallons per minute) 3-hour block averages for Wet Scrubber C40 or Wet Scrubber C40B exceeds the maximum allowable value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average process water flow rate is back at or below the maximum allowable value.
(4) The requirements in Conditions E.(1) through E.(3) shall not apply on days that Wet Scrubber C40 and/or Wet Scrubber C40B or the equipment that this scrubber controls is not in operation.

F. The owner or operator shall maintain a 3-hour block average additive feed rate (in gallons per hour) for Wet Scrubber C40 and Wet Scrubber C40B at or above the average rate observed during the most recent performance test that demonstrated compliance with the VOC and HAP limits in this permit.
(1) The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the additive feed rate (in gallons per hour) for Wet Scrubber C40 and Wet Scrubber C40B. This equipment shall be installed, operated, and maintained in accordance with the Department approved facility's O&M Plan.
(2) The owner or operator shall collect and record the additive feed rate (in gallons per hour) for Wet Scrubber C40 and Wet Scrubber C40B at a minimum of once every 15 minutes and calculate and record the 3-hour block average. The 3-hour block average additive feed rate for Wet Scrubber C40 and Wet Scrubber C40B shall be calculated using all data points collected during the averaging period.
(3) If any of the additive feed rate (in gallons per hour) 3-hour block averages for Wet Scrubber C40 or Wet Scrubber C40B falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average additive feed rate is back at or above the minimum

required value.

(4) The requirements in Conditions F.(1) through F.(3) shall not apply on days that Wet Scrubber C40 and/or Wet Scrubber C40B or the equipment that this scrubber controls is not in operation.

G. If a chiller was used during performance testing, the owner or operator shall maintain a 3-hour block average process water temperature (in degrees Fahrenheit) for Wet Scrubber C40 and Wet Scrubber C40B at or below the average temperature observed during the most recent performance test that demonstrated compliance with the VOC and HAP limits in this permit.

(1) The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the process water temperature (in degrees Fahrenheit) for Wet Scrubber C40 and Wet Scrubber C40B. This equipment shall be installed, operated, and maintained in accordance with the Department approved facility's O&M Plan.

(2) The owner or operator shall collect and record the process water temperature (in degrees Fahrenheit) for Wet Scrubber C40 and Wet Scrubber C40B at a minimum of once every 15 minutes and calculate and record the 3-hour block average. The 3-hour block average process water temperature for Wet Scrubber C40 and Wet Scrubber C40B shall be calculated using all data points collected during the averaging period.

(3) If any of the process water temperature (in degrees Fahrenheit) 3-hour block averages for Wet Scrubber C40 or Wet Scrubber C40B exceeds the demonstrated chiller compliance temperature, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average process water temperature is back at or below the maximum allowable value.

(4) The requirements in Conditions G.(1) through G.(3) shall not apply on days that Wet Scrubber C40 and/or Wet Scrubber C40B or the equipment that this scrubber controls is not in operation.

H. The owner or operator shall maintain on-site a copy of the most recent performance test report for each scrubber operating mode, i.e., "full rate" and "reduced rate" that demonstrated compliance with the VOC and HAP emission limits in this permit. At a minimum, each report shall include:

(1) The emission rates (in pounds per hour) observed during the performance test;

(2) The average beer feed rate (in gallons per minute) observed during the performance test.

(3) The average differential pressure drop (in inches of water column) across Wet Scrubber C40 and Wet Scrubber C40B observed during the performance test;

(4) The average total water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B observed during the performance test;

(5) The average process water flow rate (in gallons per minute) for Wet Scrubber C40 and Wet Scrubber C40B observed during the performance test;

(6) The identification of the additive used during the performance test;

(7) The average additive feed rate (in gallons per hour) for Wet Scrubber C40 and Wet Scrubber C40B observed during the performance test; and,

(8) The average water temperature (in degrees Fahrenheit) observed during the performance test if the scenario involved the use of a chiller.

I. The owner or operator shall operate, inspect, and maintain Wet Scrubber C40 and Wet Scrubber C40B according to the Department approved facility's O&M Plan. In

accordance with Administrative Consent Order (ACO) No. 2023-AQ-12 dated May 8, 2023, the owner or operator shall conduct quarterly inspections, control equipment cleaning, and control equipment maintenance on fermentation scrubbers EP S40 and EP S40B. In accordance with Administrative Consent Order (ACO) No. 2023-AQ-12 dated May 8, 2023, these scheduled inspections, cleanouts, and maintenance shall be conducted at least 30 days prior to a scheduled compliance stack test event, while unscheduled maintenance activities may continue to be conducted as needed to meet operational requirements.

(1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:
   a. The date that any inspection and/or maintenance was performed on the control equipment;
      i. The owner or operator shall conduct inspection and/or maintenance activities according to the facility's O&M plan.
   b. Any issues identified during inspection and maintenance activities;
   c. The date each issue was resolved; and
   d. Identification of the staff member performing the maintenance or inspection.

(2) In accordance with Administrative Consent Order (ACO) No. 2023-AQ-12 dated May 8, 2023, the owner or operator shall develop and submit for DNR approval updated O&M Plans for EP S40 and EP S40B that will prevent the cause of the December 2021 and May through July 2022 excess emissions events from reoccurring. (Submitted 11/7/2023)

J. The Scrubber Bypass Operating Scenario is defined as the bypass of emissions from Fermenters #1 – #7 and Beer Well (EU-P40) from venting through both Scrubbers (CE-C40 and CE-C40B) simultaneously. The owner or operator is limited to operating under the Scrubber Bypass Operating Scenario for a maximum of 12 hours per twelve-month rolling period. Monitoring of the differential pressure drop, scrubber total water flow rate, scrubber process water flow rate, additive feed rate, and scrubber process water temperature is not required under the Scrubber Bypass Operating Scenario. On a monthly basis, the owner or operator shall:

(1) Record the total number of hours of operation under the Scrubber Bypass Operating Scenario.

(2) Calculate and record the twelve-month rolling total number of hours of operating under the Scrubber Bypass Operating Scenario.

Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height (ft, from the ground): 70
Stack Opening (inches, dia.): 20
Exhaust Flow Rate (scfm): 7,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Compliance Demonstration(s)
Table 2 - Compliance Demonstrations – Full Rate Scrubber Operation

EP	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
EP-S40 EP-S40B	VOC[1]	Stack Testing[2]	Once Every 36 Months [3, 4, 5]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
	HAP[6]	Stack Testing**Error! Bookmark not defined.**	Once Every 36 Months [3, 4, 5]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] VOC compliance may be determined using the sum of the Method 320 or Method 18 results.
[2] Testing on EP-S40 and EP-S40B shall be conducted simultaneously, while all the affected equipment is operating in a capacity of at least 90% of the maximum (normal) operating rate.
[3] In accordance with Administrative Consent Order (ACO) No. 2023-AQ-12 dated May 8, 2023: starting in the first full calendar quarter following May 8, 2023, the owner or operator shall begin conducting quarterly compliance stack testing with at least 45 days between test events. At least one test shall be conducted during the months of June, July, or August to establish the summer operating parameters, covering the months of May through September as described in Operating Condition A. for this period. The facility shall use those tests that demonstrate compliance with the permitted emission limits in construction Permit Condition 1 to establish the scrubber water flow rate, process water flow rate, the additive feed rate, and the chiller water temperature (if process water and/or a chiller are used as detailed in Construction Permit Condition 5). If all emissions data from both preliminary emissions tests and compliance stack tests demonstrates the source is operating in compliance with the emission limits for four consecutive tests, the testing may be reduced to testing two times a year with one test occurring in June, July, or August of each year. Emissions data that demonstrates noncompliance with the permitted emission limits or cancellation of a scheduled compliance test without written DNR approval will reset the quarterly testing requirement.

[4] In order to establish the winter operating parameters, the facility shall conduct compliance stack testing for the qualifying seasonal period covering the months of October through April (winter) as described in Permit Condition A, per the schedule outlined in footnote 3 above.
[5] Seasonal (winter): If the owner or operator opts to comply only with the operating parameters established during the June, July, or August (summer) testing (i.e., the owner or operator decides they no longer want to perform winter testing and operate at winter rates), the owner or operator shall amend this permit to remove the winter testing and the applicable seasonal operating rate requirements.
[6] Acetaldehyde, acrolein, formaldehyde and methanol shall be tested for specifically. With the exception of acetaldehyde, acrolein, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

Table 1 - Compliance Demonstrations – Reduced Rate Scrubber Operation

EP	Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
EP-S40 EP-S40B	VOC[1]	Stack Testing[2]	Once Every 36 Months [3, 4, 5]	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
	HAP[6]	Stack Testing**Error! Bookmark not defined.**	Once Every 36 Months **Error! Bookmark not defined., Error! Bookmark not defined., Error! Bookmark not defined.**	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

[1] VOC compliance may be determined using the sum of the Method 320 or Method 18 results.
[2] Testing on EP-S40 and EP-S40B shall be conducted simultaneously (if both emission points are online), while the beer feed rate is maintained below 90% of the maximum (normal) operating rate.
[3] After the first reduced rate scrubber operation testing, the owner or operator shall conduct reduced rate scrubber operation testing once every 36 months. Testing at reduced rate scrubber operation may be conducted in any calendar month to demonstrate compliance with VOC and HAP emission limits in this permit; however, if reduced rate scrubber operation testing is not conducted during the months of June, July, or August, the scrubbers shall not be operated at the reduced rate operating parameters during these months. The next stack test shall be completed no later than August 31, 2025.
[4] Reduced-rate: If the owner or operator opts to comply only with the operating parameters established for the full rate testing (i.e., the owner or operator decides they no longer want to perform reduced-rate testing and operate at a reduced-rate), the owner or operator shall amend this permit to remove the reduced-rate testing and the applicable reduced-rate operating rate requirements.
[5] If the owner or operator opts to operate at only the Reduced Rate Operating Scenario (i.e., the owner or operator decides they no longer want to operate at maximum production capacity), the owner or operator shall amend this permit to remove the normal operating capacity testing and limit the production capacity of the plant.
[6] Acetaldehyde, acrolein, formaldehyde and methanol shall be tested for specifically. With the exception of acetaldehyde, acrolein, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

Authority for Requirement: DNR Construction Permit 03-A-1316-S12, 05-A-239-S11

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in

the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required?	**Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required?	**Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required?	**Yes** ☒ **No** ☐

The requirements of the Operational Limits & Reporting/Record keeping satisfy the requirements for CAM.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S90 & EP S91

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP S90	EU S90	DDGS Loadout #1 (Truck)	CE C90: Baghouse	DDGS	125 tons/hour DDGS	03-A-1318-S4
		DDGS Loadout #2 (Rail)				
		DDGS Hopper Drag			NA	
		DDGS Storage #1			75 tons DDGS	
EP S91	EU S91	DDGS Loadout #2 (Truck)	CE 91: Baghouse	DDGS	180 tons/hour, Dried Distillers Grain with Solubles	06-A-647-S4
		DDGS Hopper Drag			NA	
		DDGS Storage #2			50 tons DDGS	

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from these emission point shall not exceed the levels specified below.

Combined Emission Limits
Pollutant: Volatile Organic Compounds (VOCs)
Emission Limit: 0.70 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

Pollutant: Acetaldehyde
Emission Limit: 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

Pollutant: Single HAP – Not including Acetaldehyde
Emission Limit: 0.15 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

Pollutant: Total HAP
Emission Limit: 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

The following emission limits shall not be exceeded per emission point:
Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 0.43 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit: 0.43 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall conduct a visible emissions observation on EP-S90 and EP-S91 once per calendar day.
   (1) If the owner or operator observes visible emissions from EP-S90 or EP-S91, the owner or operator shall investigate the emission units or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the emission units are not in operation.
B. The owner or operator shall operate, inspect, and maintain the Baghouses (CE-C90 and CE-C91) according to the facility's (Plant No. 42-01-019) Operation and Maintenance (O&M) Plan.
   (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:
      a. The date that any inspection and/or maintenance was performed on the control equipment;
      b. Any issues identified during inspection and maintenance activities;
      c. The date each issue was resolved; and
      d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1318-S4, 06-A-647-S4

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Emission Point	EP S90	EP S91
Stack Height (ft, from the ground)	40	25
Stack Opening (inches, dia.)	16	6
Exhaust Flow Rate (scfm)	1,500	1,500
Exhaust Temperature (°F)	Ambient	Ambient
Discharge Style	Vertical Unobstructed	Horizontal
Authority for Requirement	03-A-1318-S4	06-A-647-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing: One representative stack test may be completed for either emission point.
Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
CAM plan is located in Appendix B

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S70

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU P70	DDGS Cooler	CE C70: Baghouse	DDGS	21.1 tons/hr	03-A-1317-S6

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 03-A-1317-S6
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of "*No Visible Emissions (NVE)*" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.26 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1317-S6
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 1.26 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limit(s): 3.85 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Pollutant: Acetaldehyde
Emission Limit(s): 0.11 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Pollutant: Single HAP – excluding Acetaldehyde
Emission Limit(s): 0.14 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Pollutant: Total HAP – Combined limit for S70 and S70B
Emission Limit(s): 0.66 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall operate, inspect, and maintain the Baghouse (CE-C70) according to the facility's (Plant No. 42-01-019) Operation and Maintenance (O&M) Plan.
   (1) The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:
      a. The date that any inspection and/or maintenance was performed on the control equipment;
      b. Any issues identified during inspection and maintenance activities;
      c. The date each issue was resolved; and
      d. Identification of the staff member performing the maintenance or inspection.

B. The Baghouse (CE-C70) differential pressure drop shall be maintained between 0.5 to 6.0 inches water column.
   (1) The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the baghouse. The monitoring devices and any recorders shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.
   (2) The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per calendar day. If the pressure drop across the baghouse falls outside the range specified in Condition B., the owner or operator shall investigate the baghouse and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the emission unit is not in operation.

C. The plant-wide total amount of dried distillers grain with solubles (DDGS) produced shall not exceed 369,643 tons per twelve-month rolling period.
   (1) By the end of the following month, the owner or operator shall record the number of tons of DDGS produced over the previous month.
   (2) By the end of the following month, the owner or operator shall calculate and record the number of tons of DDGS produced over the previous twelve months.

Authority for Requirement: DNR Construction Permit 03-A-1317-S5

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 135.5
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 28,000
Exhaust Temperature (°F): 108
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1317-S5

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing: One representative stack test may be completed for either EP S70 and EP S70B.
Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

Pollutant – PM_{10}
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒
Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
The requirements of the Operational Limits & Reporting/Record keeping satisfy the requirements for CAM.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S70B

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU P70B	DDGS Cooler	CE C70B: Baghouse 2	DDGS	21.1 tons/hr	05-A-240-S4

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: DNR Construction Permit 05-A-240-S4
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.26 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-240-S4
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit(s): 1.26 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-240-S4

Pollutant: Volatile Organic Compounds (VOCs)
Emission Limit(s): 3.49 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-240-S4

Pollutant: Acetaldehyde
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-240-S4

Pollutant: Single HAP – excluding Acetaldehyde
Emission Limit(s): 0.13 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-240-S4

Pollutant: Total HAP – Combined limit for S70 and S70B
Emission Limit(s): 0.66 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1317-S6

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall inspect and maintain the control equipment according to the facility's (plant #42-01-019) operation and maintenance plan. The owner or operator shall keep records of control equipment inspections and repairs.
B. Plant-wide, DDGS Production shall not exceed 369,643 tons per rolling twelve (12) month rolling period. After the first twelve (12) months of operation, determine the cumulative amount of DDGS on a rolling-12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permit 05-A-240-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 135.5
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 28,000
Exhaust Temperature (°F): 108
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-240-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐

CAM Plan is located in Appendix B.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F80

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU P80	Cooling Tower	CE C80: Drift Eliminator	Water	1.26 MMgal/hr	05-A-241-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 05-A-241-S3
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 1.60 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-241-S3
567 IAC 23.3(2)"a"

Pollutant: PM_{10}
Emission Limit: 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-241-S3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The circulating water in the cooling tower shall not exceed 3000 parts per million (ppm) total dissolved solids (TDS).
   i. Monitoring of the TDS shall be conducted on a monthly schedule.
   ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.

B. The Mist Eliminator (CE 80) shall be designed to meet a control efficiency of 0.005% (gallons of drift per gallon of cooling water flow) or better.

i. The cooling tower shall be operated and maintained per the facility's (Plant ID 42-01-019) operating and maintenance plans.
ii. The owner or operator shall maintain records of all maintenance and repair to the cooling tower.

C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
i. The owner or operator shall maintain SDS, or equivalent technical sheets, for all water treatment chemicals used at the facility.

Authority for Requirement: DNR Construction Permit 05-A-241-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 30
Stack Opening (inches, dia.): 216
Exhaust Flow Rate (scfm): four cells @ 389,000 scfm each
Exhaust Temperature (°F): 84
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-241-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F80B

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU P80B	Cooling Tower	CE C80B: Drift Eliminator	Water	1.26 MMgal/hr	05-A-242-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 05-A-242-S3
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 1.60 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-242-S3
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM_{10})
Emission Limit: 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-242-S3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The circulating water in the cooling tower shall not exceed 3000 parts per million (ppm) total dissolved solids (TDS).
   i. Monitoring of the TDS shall be conducted on a monthly schedule.
   ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.

B. The Mist Eliminator (CE 80B) shall be designed to meet a control efficiency of 0.005% (gallons of drift per gallon of cooling water flow) or better.

i. The cooling tower shall be operated and maintained per the facility's (Plant ID 42-01-019) operating and maintenance plans.
ii. The owner or operator shall maintain records of all maintenance and repair to the cooling tower.

C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
i. The owner or operator shall maintain SDS, or equivalent technical sheets, for all water treatment chemicals used at the facility.

Authority for Requirement: DNR Construction Permit 05-A-242-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 30
Stack Opening (inches, dia.): 216
Exhaust Flow Rate (scfm): 4 cells @ 382,350 scfm each
Exhaust Temperature (°F): 84
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-242-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP T60A, EP T60B, EP T61, EP T62

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Materia	Rated Capacity (gallons)	Construction Permit
T60A	T60A	Denatured Ethanol Storage Tank	CE T60A through CE T62: Internal Floating Roofs	Denatured Ethanol	750,000	06-A-357-S2
T60B	T60B	Denatured Ethanol Storage Tank		Denatured Ethanol	750,000	06-A-358-S2
T61	T61	Denatured Ethanol Storage Tank		Denatured Ethanol	750,000	03-A-1321-S3
T62	T62	Denatured Ethanol Storage Tank		Denatured Ethanol	750,000	03-A-1322-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 06-A-357-S2, 06-A-358-S2, 03-A-1321-S3, 03-A-1322-S3
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. These tanks shall only store denatured ethanol.
B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).
C. The owner or operator keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the lifetime of the source.
D. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

Authority for Requirement: DNR Construction Permits 06-A-357-S2, 06-A-358-S2, 03-A-1321-S3, 03-A-1322-S3
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): T60A: 52.5, T60B: 52.5, T61: 47, & T62: 47
Stack Opening, (inches): 5.6" X 8" (Note: Four (4) stacks per tank, each 5.6" X 8")
Exhaust Flow Rate (scfm): See Note
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 06-A-357-S2, 06-A-358-S2, 03-A-1321-S3, 03-A-1322-S3

Note: The airflow from these units is from the working and standing losses of the tanks. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed *below.*

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP T63 & T65

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T63	T63	200 Proof Ethanol Storage Tanks	CE T63 & CE T65: Internal Floating Roof	200 Proof Ethanol	100,000 gallons (each) 157,680,000 gallons/yr (combined)	03-A-1323-S4
T65	T65					03-A-1325-S4

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 03-A-1323-S4 & 03-A-1325-S4
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall store only anhydrous ethanol in the 200 Proof Ethanol Tanks (EU T63 and EU T65).
B. The owner or operator shall follow all applicable internal floating roof requirements listed in 40 CFR §60.112b(a)(1) and all applicable inspection requirements in 40 CFR §60.113b(a). The owner or operator shall maintain the following records:
    a. Control equipment installation and inspection records, as specified in 40 CFR §60.115b(a);
    b. Records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the lifetime of the source, as specified in 40 CFR §60.116b(b); and
    c. Any additional applicable records specified in 40 CFR §60.116b.

Authority for Requirement: DNR Construction Permits 03-A-1323-S4 & 03-A-1325-S4
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29.5
Stack Opening, (inches): Four stacks per tank, each 5.6" x 8"
Exhaust Flow Rate (scfm): Working and standing losses
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 03-A-1323-S4 & 03-A-1325-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed *below.*

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP T64

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T64	Denaturant Storage Tank	CE T64: Internal Floating Roof	Denaturant	100,000 gallons	03-A-1324-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 03-A-1324-S3
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The tank shall only store denaturant.
B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).
C. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
D. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

Authority for Requirement: DNR Construction Permits 03-A-1324-S3
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29.5
Stack Opening, (inches): 5.6" X 8" (Note: Four (4) stacks, each 5.6" X 8")
Exhaust Flow Rate (scfm): See Note
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 03-A-1324-S3

Note: The airflow from this unit is from the working and standing losses of the tank. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed *below.*

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP T66

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T66	190 Proof Ethanol Storage Tanks	CE T66: Internal Floating Roof	190 Proof Ethanol	200,000 gallons	06-A-359-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission points shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 06-A-359-S2
567 IAC 23.3(2) "d"

(1) An exceedance of the indicator opacity of 'No Visible Emissions' will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The tank shall only store anhydrous ethanol.
B. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).
C. The owner or operator keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
D. The owner or operator shall keep records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b

Authority for Requirement: DNR Construction Permits 06-A-359-S2
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb

Emission Point Characteristics
These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29
Stack Opening, (inches, dia.): 5.6" X 8" (Note: Four stacks, each 5.6" X 8")
Exhaust Flow Rate (scfm): Working and standing losses
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 06-A-359-S2

Note: The airflow from this unit is from the working and standing losses of the tank. This is variable and will depend on the ambient and operational conditions at the time.

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed *below.*

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F100

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU F100	Truck Traffic	CE-C100: Paved Road Sweeping	Dust	NA	06-A-361-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): No Visible Emissions [(1)]
Authority for Requirement: DNR Construction Permit 06-A-361-S3
567 IAC 23.3(2)"c"

[(1)] The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property.

Pollutant: Particulate Matter (PM)
Emission Limit: 4.84 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-361-S3

Pollutant: PM_{10}
Emission Limit: 0.96 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-361-S3

Pollutant: $PM_{2.5}$
Emission Limit: 0.23 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-361-S3

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall, to the greatest extent possible, ensure haul trucks are enclosed or covered.
B. All haul roads at the facility shall be paved.
C. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.
D. Any spills on the road shall be cleaned up immediately.
E. Cleaning of the haul roads shall be done at least three times per calendar week. The sweeper shall be operated according to manufacturer's specifications.
   (1) If sweeping cannot be accomplished because the ambient air temperature (as

measured at the facility during daylight operating hours) will be less than 35° F (1.7° C) or conditions due to weather (e.g., the facility uses an ice melting agent to remove ice from the facility's roads), could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.

(2) Sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period.

(3) Sweeping need not occur when a paved road(s) will not be used for that calendar week.

(4) The owner or operator shall record the frequency of cleaning performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.

F. The owner or operator shall record the number of trucks that load/unload material on a monthly basis. Based on the number of trucks the total Vehicle Miles Traveled (VMT) shall be calculated for that month.

G. Performance testing on the haul road surface silt loading shall be completed on a quarterly basis. For each performance test, silt load (g/m^2) sampling shall be done for at a minimum of three (3) different locations. The three sampled locations shall then be averaged to determine the silt loading average results.

(1) Performance testing shall be completed immediately prior to the next sweeping event.

(2) If quarterly silt load testing cannot be accomplished because conditions due to weather (i.e., the ambient air temperature (as measured at the facility during daylight operating hours) is considered extreme or precipitation events) could create hazardous conditions or affect test results, then the sampling shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sampling have abated.

(3) Upon the completion of, at a minimum, eighteen (18) monthly calculations that demonstrate compliance with the 12-month rolling total limit of 4.84 tons PM, 0.96 tons PM_{10}, and 0.23 tons $PM_{2.5}$, the owner or operator may request a permit amendment to reduce the frequency of silt load testing.

H. The owner or operator shall maintain a log of each silt load sampling event that contains, at a minimum, the following:

(1) The date of silt load sampling event;

(2) The location and the size of the sampling area;

(3) The measured silt content in grams;

(4) The average silt loading results in g/m^2 for each quarter;

(5) Sample area used for silt load sampling in meters; and,

(6) The operator's initials.

I. The owner or operator shall calculate and record the monthly haul road emissions according to the following formulas, which uses the equations from AP-42 Section 13.2.1, the empirical constants, and assumes a mean vehicle weight of 29.17 tons. On a monthly basis, the owner or operator shall calculate and record the monthly and 12-month rolling average haul road emissions.

$$E_{PM} = \frac{[0.319 * (sL)^{0.91}] * VMT}{2000}$$

Where: E = tons PM per month
sL = road surface silt loading (g/m^2) for the most recent performance test
VMT = Vehicle miles traveled

$$E_{PM10} = \frac{[0.064 * (sL)^{0.91}] * VMT}{2000}$$

Where: E = tons PM_{10} per month
sL = road surface silt loading (g/m^2) for the most recent performance test
VMT = Vehicle miles traveled per month

$$E_{PM2.5} = \frac{[0.016 * (sL)^{0.91}] * VMT}{2000}$$

Where: E = tons $PM_{2.5}$ per month
sL = road surface silt loading (g/m^2) for the most recent performance test
VMT = Vehicle miles traveled per month

(1) Should the 12-month rolling total haul road emissions exceed 90% of 4.84 tons PM (4.36 tons), 0.96 tons PM_{10} (0.86 tons), or 0.23 tons $PM_{2.5}$ (0.21 tons), the facility shall complete cleaning of the haul roads with a sweeper as described in Permit Condition E. on a daily basis.
(2) Daily sweeping shall continue until the calculated 12-month rolling total haul road emissions are less than 4.36 tons PM, 0.86 tons PM_{10}, and 0.21 tons $PM_{2.5}$.

Authority for Requirement: DNR Construction Permit 06-A-361-S3

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F90

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU F90	VOC Emissions from Equipment Leaks	CE F90: Leak Detection and Repair	Ethanol	NA	06-A-360-S2

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 13.13 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-360-S2

Pollutant: Single HAP
Emission Limit: 0.04 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-360-S2

Pollutant: Total HAP
Emission Limit: 0.08 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-360-S2

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall maintain a record of the number and types of components used at this facility. Components shall include, but are not limited to, valves, pumps, compressor seals, and flanges. On a monthly basis, the owner or operator shall:
   (1) Calculate and record the VOC and HAP emissions from equipment leaks, in tons, during the previous month using the calculation methods outlined in EPA's document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates (pages 2-10 through 2-38); and
   (2) Calculate and record the rolling twelve-month amount of VOC and HAP emissions from equipment leaks, in tons.

B. The owner or operator shall comply with all applicable requirements in NSPS Subpart VVa (40 CFR §60.480a – 40 CFR §60.489a) including the requirement to maintain a leak detection and repair plan. The owner or operator shall comply with all recordkeeping and reporting requirements specified in 40 CFR §60.486a and 40 CFR §60.487a.

Authority for Requirement: DNR Construction Permit 06-A-360-S2
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart VVa

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP SEP22

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
SEP 22	Truck Product Loadout	CE C22: Flare 5.2 MMBtu/hr	Denatured Ethanol	1,000 gal/min	03-A-1320-S6

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: See Footnote [(1)]
Authority for Requirement: DNR Construction Permit 03-A-1320-S6
567 IAC 23.3(2)"d"

[(1)] The Truck Loadout Flare (CE C22) shall operate with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours.

Pollutant: Particulate Matter (PM)
Emission Limit: 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-1320-S6
567 IAC 23.3(2)"a"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit: 0.36 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1320-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 8.30 tons/yr [(2)]
Authority for Requirement: DNR Construction Permit 03-A-1320-S6

[(2)] This limit is a combined limit for the Truck Product Loadout (EP SEP22) and Rail Product Loadout (EP SEP22B).

Pollutant: Carbon Monoxide (CO)
Emission Limit: 1.64 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-1320-S6

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The facility-wide total amount of product (denatured and undenatured ethanol) loaded into trucks and railcars shall not exceed 125 million gallons per rolling 12-month period. The total amount of fuel ethanol product switch-loaded into trucks shall not exceed 2.5 million gallons per rolling 12-month period. On a monthly basis, the owner or operator shall:
    a. Record the total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars during the previous month;
    b. Calculate and record the rolling 12-month total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars;
    c. Record the total amount of ethanol switch loaded, in gallons, into trucks during the previous month; and
    d. Calculate and record the rolling 12-month total amount of ethanol switch loaded, in gallons, into trucks.

B. The Truck Loadout Flare (CE C22) shall be used any time product is loaded into trucks. The Truck Loadout Flare (CE C22) shall:
    a. Be designed for and operated with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours;
    b. Be operated with a flame present at all times product is being loaded; and
    c. Be designed to ensure smokeless operation.

    The owner or operator shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.

C. The owner or operation shall inspect and maintain the Truck Loadout Flare (CE C22) according to the facility's operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Truck Loadout Flare (CE C22). This log shall include, but is not limited to:
    a. The date and time any inspection and/or maintenance was performed on the control equipment;
    b. Any issues identified during the inspection;
    c. Any issues addressed during the maintenance activities; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 03-A-1320-S6

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 20
Stack Opening (inches, dia.): 48
Exhaust Flow Rate (scfm): 350
Exhaust Temperature (°F): 1,830
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permit 03-A-1320-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
CAM plan is located in Appendix B.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP SEP22B

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU SEP22B	Rail Product Loadout	CE C22B: Flare (14.42 MMBtu/hr)	Denatured Ethanol	1,200 gal/min	05-A-243-S6

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: See Footnote (1)
Authority for Requirement: DNR Construction Permit 05-A-243-S6
567 IAC 23.3(2)"d"

(1) The Rail Loadout Flare (CE C22B) shall operate with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours.

Pollutant: Particulate Matter (PM)
Emission Limit: 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-243-S6
567 IAC 23.3(2)"a"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit: 1.88 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-243-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 8.30 tons/yr (2)
Authority for Requirement: DNR Construction Permit 05-A-243-S6

(2) This limit is a combined limit for the Truck Product Loadout (EP SEP22) and Rail Product Loadout (EP SEP22B).

Pollutant: Carbon Monoxide (CO)
Emission Limit: 2.50 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-243-S6

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The facility-wide total amount of product (denatured and undenatured ethanol) loaded into trucks and railcars shall not exceed 125 million gallons per rolling 12-month period. On a monthly basis, the owner or operator shall:
    a. Record the total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars during the previous month; and
    b. Calculate and record the rolling 12-month total amount of product (denatured and undenatured ethanol) loaded, in gallons, into trucks and railcars.

B. The Rail Loadout Flare (CE C22B) shall be used any time product is loaded into railcars. The Rail Loadout Flare (CE C22B) shall:
    a. Be designed for and operated with no visible emissions, except for periods not exceeding a total of five (5) minutes during any two (2) consecutive hours;
    b. Be operated with a flame present at all times product is being loaded; and
    c. Be designed to ensure smokeless operation.

    The owner or operator shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame.

C. The owner or operation shall inspect and maintain the Rail Loadout Flare (CE C22B) according to the facility's operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Rail Loadout Flare (CE C22B). This log shall include, but is not limited to:
    a. The date and time any inspection and/or maintenance was performed on the control equipment;
    b. Any issues identified during the inspection;
    c. Any issues addressed during the maintenance activities; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 05-A-243-S6

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 30
Stack Opening (inches, dia.): 60
Exhaust Flow Rate (scfm): 11,543
Exhaust Temperature (°F): 975
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permit 05-A-243-S6

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
CAM plan is located in Appendix B.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S100

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU P100	Emergency Fire Pump	Diesel	200 bhp	05-A-244-S3

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 05-A-244-S3
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 0.44 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: PM_{10}
Emission Limit: 0.44 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit: 0.44 lb/hr, 2.5 lb/MMBtu
Authority for Requirement: DNR Construction Permit 05-A-244-S3
567 IAC 23.3(3)"b"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit: 6.20 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit: 0.44 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-244-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit: 1.32 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-244-S3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. This emission unit shall operate on diesel fuel only.
B. The sulfur content of the fuel used shall not exceed 0.5% (by wt).
C. This emission unit shall not operate more than 200 hours per rolling twelve (12) month period.
D. The owner/operator shall change oil and filter on this unit every 500 hours of operation or within 1 year + 30 days, whichever comes first.
E. The owner/operator shall inspect air cleaner every 1000 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
F. The owner/operator shall inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days, whichever comes first, and replace as necessary.
G. The owner/operator shall install a non-resettable hour meter.
H. The owner/operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.
I. i. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §63.6675 and in accordance with §63.6640(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition C. (above) is not exceeded. In accordance with §60.4211, the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.

   ii. The engine is also allowed to operate up to 50 hours per year in non-emergency situations, but the 50 hours are counted toward the 100 hours provided for maintenance and testing. The 50 hours per year for non-emergency operation cannot be used to generate income for the facility to supply power to the electric grid or otherwise supply non-emergency power as part of a financial arrangement with another entity. This engine is not allowed to operate as a peak shaving unit.
J. The fuel used and its sulfur content.
K. The owner or operator shall maintain the following monthly records:
   i. the number of hours that the engine operated for maintenance checks and readiness testing;
   ii. the number of hours that the engine operated for allowed non-emergency operations;
   iii. the total number of hours that the engine operated; and
   iv. the rolling 12-month total amount of the number of hours that the engine operated.

L. The owner or operator shall maintain the following annual records:

v. the number of hours that the engine operated for maintenance checks and readiness testing; and

vi. the number of hours that the engine operated for allowed non-emergency operations.

Authority for Requirement: DNR Construction Permit 05-A-244-S3
567 IAC 23.1(4)"cz"
40 CFR 63 Subpart ZZZZ

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 11
Stack Opening (inches, dia.): 5
Exhaust Flow Rate (scfm): 730
Exhaust Temperature (°F): 800
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 05-A-244-S3

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S110A

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-110A	Hammermill #5	CE C110: Baghouse	Corn	4,000 bu/hr	19-A-674-S1
EU-111A	Hammermill #6				

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 19-A-674-S1
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "no visible emissions" (No VE) will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 0.86 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 19-A-674-S1
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall maintain the Baghouse (CE-C110) in accordance with the manufacturer's specifications and maintenance schedule. The owner or operator shall conduct inspection activities at a minimum of once per calendar year. The owner or operator shall maintain a record of all inspections and maintenance conducted on the control equipment. This record shall include, but is not limited to:
   (1) The date any inspection and/or maintenance was performed on the control equipment;
   (2) Any issues identified during the inspection;
   (3) Any issues addressed during the maintenance activities; and,
   (4) Identification of the staff member performing the maintenance or inspection.
B. The Baghouse (CE-C110) differential pressure drop shall be maintained between 0.5 to 6.0 inches water column.
   (1) The owner or operator shall properly operate and maintain equipment to monitor the differential pressure drop across the baghouse. The monitoring devices shall be

installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals.

(2) The owner or operator shall collect and record the pressure drop across the baghouse, in inches of water, once per calendar day. If the pressure drop across the baghouse falls outside the range specified in Condition B., the owner or operator shall investigate the baghouse and make corrections to it. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the baghouse is not in operation.

Authority for Requirement: DNR Construction Permit 19-A-674-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 33.5
Stack Opening (inches, dia.): 30
Exhaust Flow Rate (scfm): 20,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 19-A-674-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
CAM plan located in Appendix B

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S120

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 120	Grain Receiving Pit #3	CE C120: Baghouse	Corn	25,000 bu/hr	16-A-329
EU 121	Receiving Elevator #3				

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit: 40% (1)
Authority for Requirement: DNR Construction Permit 16-A-329
567 IAC 23.3(2)"d"

(1) An exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit: 0.67 lb/hr, 13.66 Tons/yr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 16-A-329
567 IAC 23.4(7)

Pollutant: PM_{10}
Emission Limit: 5.32 Tons/yr.
Authority for Requirement: DNR Construction Permit 16-A-329

Pollutant: $PM_{2.5}$
Emission Limit: 3.33 Tons/yr.
Authority for Requirement: DNR Construction Permit 16-A-329

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The facility shall not receive more than 481,800,000 bushels of grain in any rolling 12-month period. The owner or operator shall:
   a. On a monthly basis, record the total amount grain received at the facility, in bushels; and
   b. On a monthly basis, calculate and record the rolling 12-month total, in bushels.

B. The owner or operator shall maintain the Baghouse (CE C120) according to the facility's operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C120). This log shall include, but is not necessarily limited to:
    a. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C120);
    b. Any issues identified during the inspection and the date each issue was resolved;
    c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 16-A-329

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height (ft, from the ground): 50
Stack Opening (inches, dia.): 36
Exhaust Flow Rate (scfm): 19,400
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 16-A-329

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐

CAM Plan is located in appendix B.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP S130 and EP S140

Emission Unit	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP S130	EU 130	Grain Bin #3	CE C130: Cartridge Filters	Grain	680,00 bu	16-A-330
EP S140	EU 140	Grain Bin #4	CE C140: Cartridge Filters		680,00 bu	16-A-331

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from these emission point shall not exceed the levels specified below.

Combined Emission Limits
Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.88 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-330, 16-A-331

Pollutant: PM_{10}
Emission Limit(s): 1.05 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-330, 16-A-331

Pollutant: $PM_{2.5}$
Emission Limit(s): 0.89 lb/hr
Authority for Requirement: DNR Construction Permit 16-A-330, 16-A-331

Individual Emission Limits
Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 16-A-330, 16-A-331
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 10% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 16-A-330, 16-A-331
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall only fill either Grain Bin #3 (EU 130) or Grain Bin #4 (EU 140) at any time. Emissions shall be vented only to the Cartridge Filter (CE C130) or Cartridge Filter (CE C140) during any grain filling operation. The cartridge filter shall operate for at least 10 minutes after the grain loading operation to the steel grain bin has ceased.
B. The owner or operator shall maintain Cartridge Filter (CE C130) and Cartridge Filter (CE C140) according to the facility's operations and maintenance plan. The owner or operator shall maintain a log of all maintenance and inspection activities performed on Cartridge Filter (CE C130) or Cartridge Filter (CE C140). This log shall include, but is not necessarily limited to:
    a. The date and time any inspection and/or maintenance was performed on Cartridge Filter (CE C130) or Cartridge Filter (CE C140);
    b. Any issues identified during the inspection and the date each issue was resolved;
    c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permits 16-A-330, 16-A-331

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
S130	147.5	Vertical, unobstructed	14	Ambient	2,400
S140	147.5	Vertical, unobstructed	14	Ambient	2,400

Authority for Requirement: DNR Construction Permits 16-A-330, 16-A-331

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements

The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing: One representative stack test may be completed for emission points S130 and S140.

Pollutant - PM
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 24.108(3)

Pollutant – PM_{10} & $PM_{2.5}$
Stack Test to be Completed by (date) – 11/25/2026
Test Method - 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 24.108(3)

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 21.10(7)

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☒ **No** ☐
CAM plan located in Appendix B.
Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F130

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU F130	WDGS (Wet Cake) Storage Loadout	WDGS	NA	14-A-456-S1

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

There are no emission limits at this time.

Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

A. The total wet cake (WDGS) production at this facility shall not exceed 300,000 tons per rolling 12-month period. On a monthly basis, the owner or operator shall:
   a. Record the amount of WDGS produced, in tons, during the previous month; and
   b. Calculate and record the rolling 12-month total amount of WDGS produced, in tons.

Authority for Requirement: DNR Construction Permit 14-A-456-S1

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP F150

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU F150	Open Transportation Devices	Ethanol Loading Fugitives	NA	14-A-457

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)

The emissions from this emission point shall not exceed the levels specified below.

Pollutant: Opacity [(1)]
Emission Limit(s): No Visible Emissions
Authority for Requirement: DNR Construction Permit 14-A-457
567 IAC 23.3(2)"d"

[(1)]The permit holder shall take all reasonable precautions to prevent visible emissions from crossing the property line of this facility.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner/operator shall develop and follow a best management practice to minimize emission from open transportation vessels. This best management practice shall at a minimum outline the action steps necessary to minimize the amount of time a vessel is open without being connected to a vapor collection system or a system that would draw air into the vessel.
B. No product shall be loaded into a vessel prior to the connection of the vapor collection system to the vessel.
C. Maintain a copy of the best management practice available for review.

Authority for Requirement: DNR Construction Permit 14-A-457

Emission Point Characteristics
This emission point shall conform to the specifications listed below:

Emissions from this unit are fugitive emissions from open transportation devices (IE Railcars or tanker trucks). These emissions occur when the railcar or truck tank is opened for loading or unloading of product or material to or from the tank. This permit only accounts for the time between opening the tank and connection of the vapor collection system to the tank for loading operations.
Authority for Requirement: DNR Construction Permit 14-A-457

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Facility Maintained Operation & Maintenance Plan Required? **Yes** ☐ **No** ☒

Compliance Assurance Monitoring (CAM) Plan Required? **Yes** ☐ **No** ☒

Authority for Requirement: 567 IAC 24.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix D.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 24.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 24.105(2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 24.108(1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 24.108(14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 24.108(9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 24.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—24.104(455B), permit expiration terminates a source’s right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—24.105(455B). *567 IAC 24.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 24.105(2). *567 IAC 24.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable

inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 24.107(4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 24.108(15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 24.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 24.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 24.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 24.108 (15)"b"*

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 24.108 (9)"e"*

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 21.8(1)*

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 24.108(4), 567 IAC 24.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 24;

b. Compliance test methods specified in 567 Chapter 21; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 24.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a

violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
vi. The steps that were taken to limit the excess emission.
vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 21.7(1)-567 IAC 21.7(4)*

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 24.108(5)"b"*

G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification

1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 24.
b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—24.140(455B) through 567 - 24.144(455B));.
e. The changes comply with all applicable requirements.
f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are

invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 24.110(1)*

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 24.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 24.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 24.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

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

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;
ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
v. Are not modifications under any provision of Title I of the Act; and
vi. Are not required to be processed as significant modification under rule 567 - 24.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
ii. The permittee's suggested draft permit;
iii. Certification by a responsible official, pursuant to 567 IAC 24.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 24.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 24.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 24, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V

permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 24.111-567 IAC 24.113*

G19. Duty to Obtain Construction Permits

Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos

The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a");* training fires and controlled burning of a demolished building *(567 IAC 23.2).*

G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedances of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 24.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
    a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
    c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
    a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 24.108(9)"c"*
2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
    a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
    b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
    c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 24.108(17)"a", 567 IAC 24.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 24.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 24.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 24.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

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

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 24.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 24.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 24.111(1). *567 IAC 24.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 24.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department’s request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (42 days) of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 343-6589

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.
567 IAC 21.10(7)"a", 567 IAC 21.10(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.
567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
1101 Commercial Court, Suite 10
Manchester, IA 52057
(563) 927-2640

Field Office 2
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 725-0268

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Polk County Public Works Dept.
Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Linn County Public Health
Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

V. Appendix A

NSPS and NESHAP Links

A. 40 CFR 60 Subpart A – *General Provisions*
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A

B. Subpart Db – Standards of Performance for *Industrial Commercial Institutional Steam Generating Units*.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Db

C. 40 CFR 60 Subpart Kb – Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Kb

D. 40 CFR 60 Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VVa

E. 40 CFR 63 Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines.*
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ

Appendix B
CAM Plans

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC
Facility located in Iowa Falls, Iowa

EP S90 / S91 – DDGS Loadout Baghouse

I. Background

A. Emissions Unit

Description: DDGS Storage and Loadout (EU S90 and S91)

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 567 IAC 23.4(7)	Construction Permit DDG Loadout CAP 03-A-1318-S4 06-A-647-S4
PM Emission Limit or Standard:	0.43 lb/hr; 0.1 gr/dscf
VOC	0.70
Acetaldehyde	0.10
Single HAP	0.15
Total Hap	0.50

NOTE: Emission Limits apply to each emission point separately.

C. Control Technology

Fabric Filter Baghouse (CE C90 and CE91)

II. DDGS Storage and Loadout Baghouse Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Differential pressure across the baghouse
Measurement / Approach	The pressure drop will be monitored and recorded at least once each day of operation.
II. Indicator Range	
Range	A pressure drop of 0.5 to 6 inches of water shall be maintained during operation.
Corrective Action	Procedures, system parameters, data trends will be reviewed and the functional operation of the equipment will be assessed to determine the cause of the excursion. Once the cause is identified, a repair or adjustment will be implemented to procedures to address the excursion.
QIP Threshold	An accumulation of excursions attributed to equipment other than monitoring equipment corrected on the same day outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.
III. Performance Criteria	
Data Representativeness	Pressure drop is measured across the system
Verification of Operational Status	Records of pressure drop readings will be maintained for five years.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of five years records and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

PM emissions from DDGS Loadout are controlled by the DDGS Storage and Loadout Baghouses (EU S90 and EU S91).

Rationale for Selection of Performance Indicator

Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop is the best indicator of baghouse performance.

B. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles form a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected and returned to the process. Baghouses are highly efficient for controlling filterable PM. Baghouses are subject to failure if they are not properly operated and maintained. An indicator pressure drop of 0.5 to 6 inches of water is recommended to achieve the required control efficiency.

The selected QIP threshold for the daily pressure drop is six excursions attributed to equipment other than monitoring equipment corrected on the same day during a semi-annual reporting period. If the QIP threshold is exceeded during a semi-annual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC Facility located in Iowa Falls, Iowa

EP S70 and EP S70B –DDGS Cooler and Cyclone Baghouse

I. Background

A. Emissions Unit

Description: EU-P70: DDGS Cyclone / Cooler

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 567 IAC 23.4(7) Construction Permit 03-A-1317-S6
Construction Permit 05-A-240-S4

PM Emission Limit or Standard: 1.26 lb/hr; 0.1 gr/dscf
PM_{10} Emission Limit or Standard: 1.26 lbs/hr

NOTE: Emission limits apply to each separately.

C. Control Technology

DDG Cooler Baghouse (CE C70)

DDG Cooler Baghouse 2 (CE C70B)

II. Grain Receiving, Storage, and Handling System Baghouse Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Differential pressure across the baghouse

Measurement / Approach	The pressure drop will be monitored and recorded at least once each day of operation.
II. Indicator Range	
Range	A pressure drop of 0.5 to 6 inches of water shall be maintained during operation.
Corrective Action	Procedures, system parameters, data trends will be reviewed and the functional operation of the equipment will be assessed to determine the cause of the excursion. Once the cause is identified, a repair or adjustment will be implemented to procedures to address the excursion.
QIP Threshold	An accumulation of excursions attributed to equipment other than monitoring equipment corrected on the same day outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.
III. Performance Criteria	
Data Representativeness	Pressure drop is measured across the system
Verification of Operational Status	Records of pressure drop readings will be maintained for five years.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of five years records and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

PM, PM_{10}, and $PM_{2.5}$ emissions from the Grain Receiving, Storage, and Handling System (EU 01 – 09) are controlled by the Grain Receiving, Storage, and Handling System Baghouse.

B. Rationale for Selection of Performance Indicator

Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop is the best indicator of baghouse performance.

C. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles form a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected and returned to the process. Baghouses are highly efficient for controlling filterable PM, PM_{10}, and $PM_{2.5}$. Baghouses are subject to failure if they are not properly operated and maintained. An indicator pressure drop of 0.5 to 6 inches of water is recommended to achieve the required control efficiency.

The selected QIP threshold for the daily pressure drop is six excursions attributed to equipment other than monitoring equipment corrected on the same day during a semi-annual reporting period. If the QIP threshold is exceeded during a semi-annual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC Facility located in Iowa Falls, Iowa

EP SEP22 / EP SEP22B – Truck and Rail Ethanol Loadout Flare

I. Background

A. Emissions Unit

Description: Product Loadout and Vapor Recovery (EU SEP22/SEP22B)

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: (Rail) Construction Permit: 05-A-243-S6
(Truck) Construction Permit: 03-A-1320-S6

VOC Emission Limit or Standard: 8.30 tpy

Combined limit for Truck and Rail Loadout.

Monitoring Requirements:

- Calculate and record total amount of denatured ethanol loaded out by rail and the total by truck (in gallons) per twelve month rolling period.
- Record the amount of product switch-loaded through the truck loadout per twelve month rolling period.
- Keep records of the number of hours the flare is operated per twelve month rolling period.

C. Control Technologies

Thermal Oxidation by Flaring (CE C22)

Thermal Oxidation by flaring (CE C22B

II. Loadout Flare Monitoring Approach

A. Indicators

Presence of a flame and proper flare operation will be monitored via electronic monitoring. The electronic system will not allow ethanol loadout without presence of a flame and proper flare operation..

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Confirmation of the presence of a flame.
Measurement / Approach	The presence of a flame will be electronically monitored using a fire eye.
II. Indicator Range	
Range	The facility utilizes automatic systems and safety devices to verify that a flame is present to ensure the control of emissions. Therefore, no range is required.
Corrective Action	Each excursion triggers an inspection, corrective action, and a reporting requirement.
QIP Threshold	Six or more excursions (electronic monitoring of no flame present during loading operations) in a reporting period.
III. Performance Criteria	
Data Representativeness	Confirmation of flame presence will be electronically monitored using a fire eye.
Verification of Operational Status	Not applicable.
QA/QC Practices and Criteria	Calibrate, maintain, and operate the fire eye in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	Confirmation of flame presence will be continuously monitored via electronic monitoring.
Data Collection Procedures	The flame presence will be recorded electronically.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of 2 years records of electronic media and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

VOC emissions from Product Loadout and Vapor Recovery (EU SEP22/SEP22B) are controlled by the Ethanol Loadout Flare (CE C22/ CE C22B).

B. Rationale for Selection of Performance Indicator

The use of a flare at ethanol facilities is typically considered best available control technology (BACT) for ethanol loading operations. Since the vapors from the transport vessel are flammable, the presence of a flame in the flare results in combustion of the vapors and the destruction of VOC. Therefore, confirmation that a flame is present during loading operations is recommended to achieve the desired VOC control.

C. Rationale for Selection of Indicator Level

The indicator was selected to allow a simple and effective procedure for compliance tracking purposes. When an excursion occurs, corrective action will be initiated based upon the observed operating parameters. All excursions will be documented and reported.

The selected QIP threshold for flare operations is 6 excursions of loading operations with no flame present during the semi-annual reporting period. If the QIP threshold is exceeded in a semi-annual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC Facility located in Iowa Falls, Iowa

EP S110A

I. Background

A. Emissions Unit

Description: Hammermills #5 and #6

EU 110 A – Hammermill #5

EU 111A - Hammermill #6

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 567 IAC 23.4(7) Construction Permit 19-A-674-S1

PM Emission Limit or Standard: 0.86 lb/hr; 0.1 gr/dscf

C. Control Technology

Fabric Filter Baghouse (CE C110)

II. Hammermill Baghouse Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Differential pressure across the baghouse
Measurement / Approach	The pressure drop will be monitored and recorded at least once each day of operation.
II. Indicator Range	
Range	A pressure drop of 0.5 to 6 inches of water shall be maintained during operation.

Corrective Action	Procedures, system parameters, data trends will be reviewed and the functional operation of the equipment will be assessed to determine the cause of the excursion. Once the cause is identified, a repair or adjustment will be implemented to procedures to address the excursion.
QIP Threshold	An accumulation of excursions attributed to equipment other than monitoring equipment corrected on the same day outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.
III. Performance Criteria	
Data Representativeness	Pressure drop is measured across the system
Verification of Operational Status	Records of pressure drop readings will be maintained for five years.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of five years records and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

PM emissions from the Hammermills 5 and 6 are controlled by the Hammermills Baghouse, CE-C110.

B. Rationale for Selection of Performance Indicator

Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop is the best indicator of baghouse performance.

C. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles form a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected and returned to the process. Baghouses are highly efficient for controlling filterable PM. Baghouses are subject to failure if they are not properly operated and maintained. An indicator pressure

drop of 0.5 to 6 inches of water is recommended to achieve the required control efficiency.

The selected QIP threshold for the daily pressure drop is six excursions attributed to equipment other than monitoring equipment corrected on the same day during a semi-annual reporting period. If the QIP threshold is exceeded during a semi-annual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC Facility located in Iowa Falls, Iowa

EP S120 –Grain Receiving, Storage, and Handling System Baghouse

I. Background

A. Emissions Unit

Description: Grain Receiving, Storage, and Handling System (EU 120-121)

EU 120 Grain Receiving Pit #3
EU 121 Receiving Elevator #3

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	Construction Permit 16-A-329
PM Emission Limit or Standard:	0.67 lb/hr; 0.1 gr/dscf, 13.66 tpy
PM_{10} Emission Limit or Standard	5.32 tpy
$PM_{2.5}$ Emission Limit or Standard	3.33 tpy

C. Control Technology

Fabric Filter Baghouse (CE C120)

II. Grain Receiving, Storage, and Handling System Baghouse Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Differential pressure across the baghouse
Measurement / Approach	The pressure drop will be monitored and recorded at least once each day of operation.

II. Indicator Range	
Range	A pressure drop of 0.5 to 6 inches of water shall be maintained during operation.
Corrective Action	Procedures, system parameters, data trends will be reviewed, and the functional operation of the equipment will be assessed to determine the cause of the excursion. Once the cause is identified, a repair or adjustment will be implemented to procedures to address the excursion.
QIP Threshold	An accumulation of excursions attributed to equipment other than monitoring equipment corrected on the same day outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.
III. Performance Criteria	
Data Representativeness	Pressure drop is measured across the system
Verification of Operational Status	Records of pressure drop readings will be maintained for five years.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of five years records and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

PM, PM_{10}, and $PM_{2.5}$ emissions from the Grain Receiving #3, Storage, and Handling System (EU 120-121) are controlled by the Grain Receiving #3 System Baghouse.

B. Rationale for Selection of Performance Indicator

Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop is the best indicator of baghouse performance.

C. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles form a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected and returned to the process.

Baghouses are highly efficient for controlling filterable PM, PM_{10}, and $PM_{2.5}$. Baghouses are subject to failure if they are not properly operated and maintained. An indicator pressure drop of 0.5 to 6 inches of water is recommended to achieve the required control efficiency.

The selected QIP threshold for the daily pressure drop is six excursions attributed to equipment other than monitoring equipment corrected on the same day during a semi-annual reporting period. If the QIP threshold is exceeded during a semi-annual reporting period, a QIP will be developed and implemented.

Compliance Assurance Monitoring Plan for POET Biorefining – Iowa Falls, LLC Facility located in Iowa Falls, Iowa

EP S130 and EP S140 Grain Bins #3 and #4

I. Background

A. Emissions Unit

Description: Steel Grain Bins (#3 and #4)
EU 130 and EU 140

Facility: POET Biorefining – Iowa Falls, LLC
Iowa Falls, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Construction Permit: 16-A-330
Construction Permit: 16-A-331

PM Emission Limit or Standard: 1.88 lb/hr; 0.1 gr/dscf

C. Control Technology

Fabric Filter Baghouse (CE C130 and CE C140)

II. DDGS Cooler Baghouse Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1: Monitoring Approach

I. Indicator	
Indicator	Differential pressure across the baghouse
Measurement / Approach	The pressure drop will be monitored and recorded at least once each day of operation.
II. Indicator Range	
Range	A pressure drop of 0.5 to 6 inches of water shall be maintained during operation.

Corrective Action	Procedures, system parameters, data trends will be reviewed and the functional operation of the equipment will be assessed to determine the cause of the excursion. Once the cause is identified, a repair or adjustment will be implemented to procedures to address the excursion.
QIP Threshold	An accumulation of excursions attributed to equipment other than monitoring equipment corrected on the same day outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.
III. Performance Criteria	
Data Representativeness	Pressure drop is measured across the system
Verification of Operational Status	Records of pressure drop readings will be maintained for five years.
QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with the Facility Operation and Maintenance Plan.
Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
Record Keeping	Maintain for a period of five years records and corrective actions taken in response to excursions.
Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

III. Justification

A. Background

PM emissions from the Grain Bins (EU S130 and EU S140) are controlled by the Grain Bin Baghouse.

B. Rationale for Selection of Performance Indicator

Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop is the best indicator of baghouse performance.

C. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles form a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected and returned to the process. Baghouses are highly efficient for controlling filterable PM. Baghouses are subject to failure if they are not properly operated and maintained. An indicator pressure

drop of 0.5 to 6 inches of water is recommended to achieve the required control efficiency.

The selected QIP threshold for the daily pressure drop is six excursions attributed to equipment other than monitoring equipment corrected on the same day during a semi-annual reporting period. If the QIP threshold is exceeded during a semi-annual reporting period, a QIP will be developed and implemented.

Appendix C
Administrative Consent Order No. 2023-AQ-12

R. SERIES/ Initials Con10-1 / MF
FACILITY ID 42-01-019
WKACT/Doc Code CO / AO
Permit #
Date Rec 5/8/23

IOWA DEPARTMENT OF NATURAL RESOURCES

ADMINISTRATIVE CONSENT ORDER

IN THE MATTER OF: POET BIOREFINING – IOWA FALLS, LLC	ADMINISTRATIVE CONSENT ORDER NO. 2023-AQ- 12

TO: POET Biorefining – Iowa Falls, LLC
Corporation Service Company, Registered Agent
505 5th Avenue, Suite 729
Des Moines, Iowa 50309

POET Biorefining – Iowa Falls, LLC
Matt Struck, Environmental Health and Safety Manager
21050 140th Street
Iowa Falls, Iowa 50126

POET Biorefining – Iowa Falls, LLC
Jim Schonert, General Manager
21050 140th Street
Iowa Falls, Iowa 50126

I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and POET Biorefining – Iowa Falls, LLC (POET) for the purpose of resolving air quality violations. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this administrative consent order should be directed to:

Relating to technical requirements:
Mark Fields
Iowa Department of Natural Resources
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034
Phone: 515-343-6589

Relating to legal requirements:
Anne Preziosi, Attorney for the DNR
Iowa Department of Natural Resources
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034
Phone: 515-238-3429

AQB Box 2367
2367-009

Payment of penalty to:
Director of the Iowa DNR
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034

II. JURISDICTION

This administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1), which authorize the director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the director to assess administrative penalties.

III. STATEMENT OF FACTS

Background

1. POET has a dry-mill grain processing facility located in Iowa Falls, Iowa. POET produces over 115 million gallons of ethanol per year. POET also produces high-quality livestock feed solutions for regional, national and international markets. On June 1, 2021, POET acquired this facility, which was formerly known as the Flint Hills Resources Iowa Falls and Hawkeye Renewables, LLC ethanol facilities.

2. Prior to POET's acquisition of this Iowa Falls Ethanol facility in June 2021, two emission control units at the facility had consistently been out of compliance with permitted limits contained in air quality construction permits, and with stack testing requirements contained in air quality construction permits. These emission points are Emission Point (EP) S40 (fermentation process) and EP S40B (fermentation process scrubbers).

- On September 13, 2018, DNR issued a Notice of Violation letter (NOV) for a failed stack test on EP S40B for Acetaldehyde.
- On September 14, 2017, DNR issued an NOV for stoppage of June 15, 2017, stack testing when emission violations were being demonstrated.
    - The NOV dated September 14, 2017, contained the following language: "Flint Hills Resources made repairs to the chiller system and conducted a second compliance test for EP S40 and EP S40B on June 19,

2017. This testing shows Flint Hills in compliance with the fermentation process's VOC limits."

- On October 20, 2016, DNR issued an NOV for failure to conduct stack testing when preliminary emissions[1] were shown to exceed construction permit limits for EP S40.
- On September 23, 2011, DNR issued an NOV for failure to maintain control equipment associated with EP S40 and EP S40B and for stack test results showing emission limit violations.

3. On September 27, 2021, DNR issued Construction Permit Nos. 03-A-1316-S10 (EP S40) and 05-A-239-S9 (EP S40B), to POET.

POET has failed to comply with the provisions of air quality construction permits for EP S40 and EP S40B

4. POET has failed to comply with the Condition 1 (Emission Limits) of Construction Permit Nos. 03-A-1316-S10 (EP S40) and 05-A-239-S9 (EP S40B).

- Condition 1 establishes a Prevention of Significant Deterioration (PSD) Synthetic Minor combined emission limit of 20.0 lb/hr for volatile organic compounds (VOC), 2.12 lb/hr for total hazardous air pollutants (Total HAP), 0.90 lb/hr for Acetaldehyde, and 0.36 lb/hr for Single HAP (Acrolein) for EP S40 and EP S40B.
    - As stated above, EP S40 and EP S40B have construction permits that contain combined emissions limits for VOC, Total HAP, and Single HAP. Therefore, an Excess Emissions report of VOC, Total HAP, or Single HAP emissions for either the EP S40 or EP S40B VOC, Total HAP, or Single HAP permitted limits constitutes excess emissions for both emission points.
    - According to the written excess emission report dated December 10, 2021, for the excess emission event covering December 6, 2021, through December 8, 2021, preliminary emissions test data demonstrated violations of the combined VOC, Total HAP, Acetaldehyde and Acrolein emission limits on EP S40 and S40B.

[1] Preliminary emissions testing is any emissions testing conducted on an emission source from the time a stack test has been scheduled with DNR until the time the DNR scheduled compliance stack test has begun. This does not exclude any other emissions data from being used as credible evidence per 567 IAC 21.5.

- According to the written excess emission report dated December 13, 2021, for the excess emission event covering December 8, 2021, through December 9, 2021, preliminary emissions test data demonstrated violations of the combined VOC, Total HAP, Acetaldehyde, Methanol, and Acrolein emission limits on EP S40 and S40B.

- According to the written excess emission report received June 9, 2022, for the excess emission event covering May 31, 2022, through June 2, 2022, preliminary emissions test data demonstrated a violation of the combined VOC, Total HAP, Acetaldehyde and Acrolein emission limits on EP S40 and S40B.

5. POET has failed to comply with Condition 5 (Operating Requirements with Associated Monitoring and Recordkeeping), Condition 8 (Owner and Operator Responsibility), and Condition 11 (Excess Emissions) of Construction Permit No. 03-A-1316-S10 (EP S40B).

- Conditions 5(D) and 5(E) require water flow rate and additive rate to the scrubber to be maintained at the level of the most recent stack test that demonstrated compliance with the emission rates.

  - According to the excess emission report received December 9, 2021, for the excess emission event covering the time period of 11:16 pm on December 8, 2021, through 12:01 am on December 9, 2021, the scrubber was shut down for maintenance and cleaning activities while underlying equipment was in operation. Emissions were released uncontrolled from EP S40, resulting in violations of applicable permitted limits for VOC, Total HAP, and Single HAP. Water and additive rates were not maintained as required by the permit.

- Condition 8 requires that adequate operation and maintenance be provided to ensure that no condition of air pollution is created.

  - The December 7, 2021, December 9, 2021, and June 9, 2022, excess emission reports demonstrate that adequate operation and maintenance of the Fermentation Process was not conducted to prevent air pollution.

- Condition 11 requires that cleaning of control equipment, which does not require the shutdown of process equipment, shall be limited to one (1) six-minute period per each one (1) hour period.
    - Scrubber waste gas was routed to the EP S40 scrubber EP S40 as maintenance activities were executed on EP S40B.
        - Isolation activities were performed for a total of 22 minutes during two separate time periods. Performing cleaning isolation activities for 22 minutes while emissions from EP S40B were released uncontrolled is a violation of Condition 11 and of 567 Iowa Administrative Code (IAC) rule 24.1(1).
            1. From 11:46 pm on December 8, 2021, through 12:01 am on December 9, 2021, a blind was inserted into the inlet piping of EP S40B for the control of hazardous energy to accommodate human safety requirements to perform maintenance.
                - The gas flow to EP S40 was temporarily routed to the atmosphere during blind placement activities.
            2. After maintenance was completed, from 7:32 am to 7:39 am on December 9, 2021, the blind was removed.
                - The gas flow to EP S40 was temporarily routed to the atmosphere during blind removal activities.

The construction permit violations of the provisions of the air quality construction permits for EP S40 and EP S40B have been demonstrated through stack test and excess emissions data

6. The owner of new or existing equipment or the owner's authorized agent shall conduct emission tests to determine compliance with applicable rules in accordance with the provisions of 567 IAC 25.1(7). POET has failed to comply with the rules that would allow a demonstration of compliance through stack

testing. First, POET was required to notify DNR in writing not less than 30 days before a stack test. The purpose of this notice is to allow DNR to observe the stack test. If the owner or operator does not provide timely notice to the DNR, then DNR shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Second, a testing protocol is required to be submitted to DNR at least 15 days before the owner or operator conducts the stack test. Third, a representative of DNR shall be permitted to witness the stack test.

7. Preliminary emissions tests are commonly conducted by ethanol facilities prior to conducting a compliance stack test. Preliminary emissions tests are not subject to the same notification and EPA test method requirements as compliance stack tests. Any emissions data gathered during the preliminary emissions testing may be used as credible evidence consistent with 40 CFR sections 60.11, 61.12, and 567 IAC 21.5.

8. As stated above, the facility was acquired by POET on June 1, 2021. On June 15, 2021, POET conducted compliance stack testing on EP S40 and EP S40B. This compliance stack testing demonstrated compliance with the permitted VOC, Total HAP, and Single HAP emission limits.

9. On November 1, 2021, POET submitted a stack test protocol, as required, to schedule compliance stack testing with DNR for EP S40 and EP S40B on December 8 and 9, 2021.

10. On December 7, 2021, POET reported exceedances of emission limits on EP S40 and EP S40B to DNR Field Office No. 2, based on preliminary emissions test data. POET also contacted the DNR Air Quality Bureau to notify that the compliance stack testing would not be conducted as scheduled due to preliminary emissions test data indicating emission results of over double the 20.0 lb/hr combined VOC emission limit contained in the construction permits for EP S40 and EP S40B. POET was notified at that time by DNR that compliance stack testing needed to be conducted as scheduled on December 8 and 9, 2021, regardless of emission levels. Based on the December 7, 2021, preliminary emissions testing results, the scheduled compliance stack testing on December 8 and 9, 2021, was cancelled by POET. POET's cancellation of the scheduled compliance stack testing did not provide DNR the opportunity to observe the compliance stack testing scheduled to be conducted on December 8 and 9, 2021.

11. On December 9, 2021, POET again reported excess emissions of emission limits on EP S40 and EP S40B to Field Office No. 2, based on preliminary emissions test data. The air pollution control equipment associated with EP S40B was "blinded" and emissions were released uncontrolled for 45 minutes to conduct

maintenance and cleaning activities while underlying equipment was in operation. As stated above, this testing was not observed by DNR.

12. On December 10, 2021, POET submitted the required written follow-up to the December 7, 2021, excess emissions report. POET reported excess emissions from EP S40 and EP S40B in the following amounts: VOC - 1862 lbs, Acetaldehyde – 15.55 lbs, Acrolein – 0.41 lbs, and Total HAP – 3.23 lbs.

13. Also, on December 13, 2021, POET submitted the required written follow-up to the December 8 and 9, 2021, excess emissions report. POET reported excess emissions on EP S40 and EP S40B in the following amounts: VOC - 251 lbs, Acetaldehyde – 1.8 lbs, Methanol – 0.05 lbs, and Total HAP – 1.85 lbs.

14. In January 2022, POET submitted a stack test protocol to reschedule the cancelled December 2021 compliance stack testing on EP S40 and EP S40B for DNR to observe the stack testing on February 16 through 19, 2022.

15. On January 19, 2022, POET submitted a stack test report for the December 2021 test event without results from the EP S40 and EP S40B simultaneous compliance stack testing that had been scheduled with DNR to be conducted December 8 and 9, 2021.

16. On February 16, 2022, POET conducted compliance stack testing on EP S40 and EP S40B that demonstrated compliance with the permitted VOC, Total HAP, and Single HAP limits.

17. On February 28, 2022, DNR issued an NOV to POET for violations resulting from the December 2021 test event on EP S40 and EP S40B. VOC, Total HAP, Acetaldehyde, and Acrolein violations were documented for EP S40 and EP S40B. POET had postponed the December 8 and 9, 2021, stack test event. POET reported the excess emissions violation. DNR was unable to directly observe a compliance stack test that would have resulted in a documented violation. Violations are based on POET's reported preliminary emission test results in excess of emissions limits and on excess emission reports submitted for the time frame of scheduled compliance testing.

18. On April 29, 2022, POET submitted a test protocol to DNR scheduling compliance stack testing on EP S40 and EP S40B for June 1, 2022.

19. On May 31, 2022, POET contacted DNR Field Office No. 2 to report preliminary emissions data demonstrating emissions on EP S40 and EP S40B

were shown to be in excess of the permitted emission limits. VOC and Acetaldehyde emissions were reported to be in excess of the permitted limits for EP S40 and EP S40B. DNR did not observe the May 31, 2022, preliminary emissions testing. POET claimed the inability to test on June 1, 2022, and cancelled the scheduled compliance test that DNR would have observed. POET's cancellation of the scheduled compliance stack testing did not provide DNR the opportunity to observe the compliance stack testing on June 1, 2022. Additionally, the emission limit violations were not documented by completing a compliance stack test.

20. On June 1, 2022, POET contacted DNR requesting to modify the April 29, 2022, test protocol to allow additional sources or scrubber operating scenarios to be tested. DNR denied the request since the facility had not met the required stack test notification and stack test protocol time frames.

21. On June 3, 2022, POET reported excess emissions on EP S40 and EP S40B. POET reported pressure that built up in the fermentation process necessitated the EP S40B scrubber to be restarted.

22. On June 7, 2022, POET submitted two written excess emission reports dated June 7, 2022:

- First, for the May 31 through June 2, 2022, excess emission event POET reported excess emissions on EP S40 and EP S40B in amounts of VOC - 1056 lbs, Acetaldehyde – 107 lbs, Acrolein – 0.47 lbs, and Total HAP – 62 lbs.

- Second, for the June 2 through 3, 2022, excess emission event POET reported excess emissions on EP S40 and EP S40B in amounts of VOC – 63.03 lbs, Acetaldehyde – 6.36 lbs, Acrolein – 0.03 lbs, and Total HAP – 3.70 lbs.

23. POET's June 7, 2022, follow-up report to DNR stated that the excess emissions started on May 31, 2022, while POET was collecting preliminary emissions data from EP S40B. The excess emissions event ended on June 2, 2022, when POET reduced production at the facility, which allowed the emissions to drop below the permitted limits. However, the production levels were raised back to full rates after the June 7, 2022, reduced rate compliance stack test that demonstrated compliance.

24. DNR issued a July 8, 2022, NOV to POET for VOC violations resulting from the May 31, 2022, unobserved preliminary emissions test on EP S40 and EP S40B. In addition, Acetaldehyde, Acrolein, and Total HAP violations

were documented on EP S40B. POET postponed the June 1, 2022, stack test event. POET reported the excess emissions violation. DNR was unable to directly observe a compliance stack test that would have resulted in a documented violation. Violations are based on POET's reported preliminary emission test results in excess of emissions limits and excess emission reports submitted for the scheduled compliance test event timeframe.

POET has failed to comply with the provisions of air quality construction permits for EP S10B

25. POET has failed to comply with the provisions of Condition 6, (*Continuous Emissions Monitoring Systems (CEMS)*) of Construction Permit No. 05-A-238-S10 (EP S10B, DDGS Dryers and Distillation).

- Condition 6 requires POET to install and operate a CEMS for Nitrogen Oxides (NOx) pursuant to the provisions of 40 CFR 60, Appendices B and F.
    - POET reported that the NOx monitor installed on EP S10B did not operate 7.6% of the time that the emission point was in operation during the 3rd Quarter of 2021. The analyzer was in operation 92.4% of the operating time during the quarter.

26. DNR issued a December 13, 2021, NOV to POET for excess CEMS analyzer downtime of 7.6% and an analyzer operating time of 92.4% during the 3rd quarter of 2021 for the EP S10B CEMS monitor.

POET has failed to timely obtain air quality construction permits

27. 567 IAC 22.1(1) requires no person shall construct, install, reconstruct or alter any equipment, control equipment without first obtaining a construction permit. On June 7, 2022, a DNR stack tester observed that the facility had installed and was operating equipment that allowed process water to be reused in the fermentation scrubber control equipment on EP S40 and EP S40B without first obtaining a construction permit, as required.

28. Process water reuse reduces the efficiency of the fermentation scrubbers and has shown to cause fermentation scrubber and emission issues at other POET facilities. The facility had conducted engineering testing under various levels of reuse water the day prior to determine emission impacts.

29. DNR issued a July 8, 2022, NOV for failure to obtain construction permit prior to installing and operating equipment to allow process water reuse in

the fermentation scrubbers. POET submitted permit applications to include water reuse equipment and operating conditions. Construction Permit Nos. 03-A-1316-S11 and 05-A-239-S10 were issued on September 26, 2022, with updated process water monitoring and recordkeeping requirements.

POET has failed to consistently maintain and operate its equipment and control equipment in a manner consistent with good practice for minimizing emissions, as required

30. As detailed above, POET has failed to consistently maintain and operate its equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by 567 IAC 24.2. In addition to the above excess emission events, POET has reported the following additional excess emission events related to the fermentation processes.

31. On August 19, 2021, POET reported exceedances of emission limits on EP S40 and EP S40B to Field Office No. 2. The August 18 and August 19, 2021, excess emissions were reportedly due to loss of water flow to the EP S40B CO2 scrubber caused by a water flow meter malfunction. Excess emissions were reported as VOC – 667.77 lbs, Acetaldehyde - 3.174 lbs, and Total HAP – 2.45 lbs.

32. On September 29, 2021, POET reported exceedances of emission limits on EP S40 to Field Office No. 2. The September 29, 2021, excess emissions were reportedly due to loss of water flow to EP S40 CO2 scrubber due to flow meter malfunction. Excess emissions were reported as VOC – 111 lbs and Acetaldehyde - 0.354 lbs.

33. On November 24, 2021, POET reported exceedances for Fermentation Tank #5 to Field Office No. 2 that occurred on November 23, 2021. On November 23, 2021, excess emissions were reportedly due to pressures experienced above the PRV Valve release set point, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 3.764 lbs.

34. On January 17, 2022, POET reported exceedances for the fermentation process to Field Office No. 2. The January 17, 2022, excess emissions were reportedly due to replacing a faulty CO2 header expansion boot, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 965 lbs and Acetaldehyde - 0.257 lbs.

35. On April 26, 2022, POET reported exceedances for Fermentation Tanks #1, 2, and 7 to Field Office No. 2. The April 26, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set

points, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 103.06 lbs and Acetaldehyde - 0.078 lbs.

36. On April 29, 2022, POET reported exceedances for Fermentation Tank #1-7 to Field Office No. 2. The April 29, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set points, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 145 lbs and Acetaldehyde - 0.2 lbs.

37. On June 20, 2022, POET reported exceedances for Fermentation Tank #5 to Field Office No. 2. The June 20, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set point, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 377.6 lbs and Acetaldehyde -1.231 lbs.

38. On August 19, 2022, POET reported August 18, 2022, exceedances for the Fermentation tank #2 to Field Office No. 2. The August 18, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set point due to the fermenter overheating, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 31.68 lbs.

39. On September 12, 2022, POET reported September 11, 2022, exceedances on the Fermentation tanks 2, 3, and 4 to Field Office No. 2. The September 11, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set point, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 31.18 lbs.

40. On September 16, 2022, POET reported exceedances on the Fermentation tanks 3 and 4 to Field Office No. 2. The September 16, 2022, excess emissions were reportedly due to pressures experienced above the PRV Valve release set point, causing the uncontrolled release of emissions. Excess emissions were reported as VOC – 10.72 lbs.

POET has failed to comply with the provisions of its Title V operating permit

41. Title V operating permit 19-TV-005 was issued to POET on September 9, 2019, and expires on September 24, 2024. The above-mentioned construction permits conditions also are contained in the Title V permit. Therefore, the above-stated construction permit violations also constitute violations of the Title V permit.

42. Also, due to past excess emission events and documented emission limits violations, DNR has required DNR-approved operations and maintenance (O&M) plans for the EP S40 and EP S40B air pollution control equipment.

IV. CONCLUSIONS OF LAW

1. Iowa Code section 455B.133 provides that the Environmental Protection Commission (Commission) shall establish rules governing the quality of air and emission standards. The Commission has adopted 567 IAC chapters 20-35 relating to air quality.

2. Iowa Code section 455B.134(3) provides that the director of DNR shall grant, modify, suspend, terminate, revoke, reissue or deny permits for the construction or operation of new, modified, or existing air contaminant sources and for related control equipment.

3. 567 IAC 22.1(1) states unless exempted in subrule 22.1(2) or to meet the parameters established in paragraph *"c"* of this subrule, no person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit. As stated above, POET has installed equipment without first obtaining the required construction permits.

4. 567 IAC 22.3(3) states that a permit may be issued subject to conditions which shall be specified in writing. Such conditions may include but are not limited to emission limits, operating conditions, fuel specifications, compliance testing, continuous monitoring, and excess emission reporting. As stated above, POET has failed to comply with the requirements of issued construction permits.

5. As stated above, POET failed to conduct stack testing showing compliance with permitted limits, as required. According to the provisions of 567 IAC 25.1(7), the owner of new or existing equipment or the owner's authorized agent shall notify the department in writing not less than 30 days before a required test to determine compliance with applicable requirements of 567 IAC Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the tests and other information as required by the DNR. If the owner or operator does not provide timely notice to the DNR, the DNR shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. A testing protocol shall be submitted to the DNR no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the DNR shall be permitted to witness the tests.

6. POET has failed to consistently maintain and operate its equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions, as required by 567 IAC 24.2.

7. Title V Operating Permit No. 19-TV-005 was issued to POET on September 9, 2019, and expires on September 24, 2024. Violations of POET's construction permits, as stated above, also are violations of Title V Operating Permit No. 19-TV-005.

V. ORDER

THEREFORE, DNR orders and POET agrees to the following:

1. POET shall comply with the provisions of its air quality construction permits, including permitted limits, stack testing requirements, and completion of any changes required to conform with issued construction permits and achieve compliance; and POET shall comply with all state and federal applicable air quality requirements, ; and

2. Within 30 days of the date this Administrative Consent Order is signed by the Director, POET shall submit to DNR a written detailed report of the root cause of excess emissions from EP S40 and EP S40B from December 6 through 9, 2021, and from May 31, 2022 to July 28, 2022; and

3. Within 30 days of the date this Administrative Consent Order is signed by the Director, POET shall develop and submit for DNR approval updated O&M plans for EP S40 and EP S40B that will prevent the cause of the December 2021 and May through July 2022 excess emissions events from reoccurring; and

4. All future compliance stack testing shall be conducted as scheduled with DNR unless written approval is received from DNR prior to POET making compliance test schedule changes; and

5. Starting in the first full calendar quarter following the date this Administrative Consent Order is signed by the Director, POET shall begin conducting quarterly VOC, Total HAP, and Single HAP compliance stack testing simultaneously under maximum production rates on EP S40 and EP S40B, with at least 45 days between test events. At least one test must occur during June, July, or August of each year. If all emissions data from both preliminary emissions tests and compliance stack tests demonstrates the source is operating in compliance with the emission limits for 4 (four) consecutive tests, the testing maybe reduced to testing 2 (two) times a year with one test occurring in June, July, or August of each year. Emissions data that demonstrates noncompliance with the permitted emission limits or cancellation of a scheduled compliance test without written DNR approval will reset the quarterly testing requirement; and

6. For future stack testing of EP S40 and EP S40B, in addition to the required compliance stack test report, POET Iowa Falls shall submit to DNR all preliminary emissions testing VOC, Total HAP, and Single HAP raw data

collected 30-days or less prior to a scheduled compliance stack test event. In addition to the raw emissions data, POET Iowa Falls shall submit a summary of hourly VOC, Total HAP, and Single HAP preliminary emissions test data. An hourly summary shall consist of the preliminary VOC, Total HAP, and Single HAP emissions data for each emission limit contained in the associated construction permit, beginning with the first full hour after the start of collecting emissions data and ending the last full hour prior to starting the compliance test or completing the preliminary emission test. POET Iowa Falls must provide the DNR with this data even if the compliance stack test is not completed as scheduled. For example, if Fourier Transform Infrared (FTIR) analyzer is brought online and begins collecting emissions data at 7:17am and preliminary test ends at 1:27 pm. The hourly emissions summaries for VOC, Total HAP, and Single HAP would be for emissions data collected from 7:17 am - 8:17 am, 8:18 am-9:17 am, 9:18 am-10:17 am, 10:18 am-11:17 am, 11:18 am to 12:17 pm, and 12:18 to 1:17 pm. The hourly summaries should present the data in units of the permitted VOC, Total HAP, and Single HAP emission limits for the emission point, and;

7. Within 30 days of the date this Administrative Consent Order is signed by the Director, POET shall submit to DNR air quality construction permit applications for EP S40 and EP S40B to determine if permitted bypass hours for uncontrolled emissions can be added to conduct quarterly inspections, control equipment cleaning, and control equipment maintenance on fermentation scrubbers EP S40 and EP S40B. These scheduled inspections, cleanouts, and maintenance shall be conducted at least 30 days prior to a scheduled compliance stack test event, while unscheduled maintenance activities may continue to be conducted as needed to meet operational requirements. In addition, requirements from paragraphs 3 and 5, above, shall be added to the air quality construction Permits for EP S40 and EP S40B; and

9. Any air quality construction permit modifications necessary to implement paragraph 7, above, shall comply with all state and federal applicable air quality requirements; and

10. POET shall consistently maintain and operate its equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions; and

11. In the future, POET shall obtain construction permits timely, in accordance with the provisions of 567 IAC 22.1(1), which states no person shall construct, install, reconstruct or alter any equipment, control equipment without first obtaining a construction permit; and

12. POET shall operate in compliance with the provisions of its Title V Operating Permit; and

13. Within 30 days of the date this order is signed by the director, POET shall pay a penalty of $10,000.00.

VI. PENALTY

Pursuant to the provisions of Iowa Code section 455B.109 and 567 IAC chapter 10, which authorize the director to assess administrative penalties, a penalty of $10,000.00 is assessed by this administrative consent order. The penalty must be paid within 30 days of the date this order is signed by the director. The administrative penalty is determined as follows:

Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to $10,000.00 per day of violation for the air quality violations involved in this matter. More serious criminal sanctions are also available pursuant to Iowa Code section 455B.146A.

Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to $10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties through 567 IAC chapter 10. Pursuant to this rule, DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with a penalty. The administrative penalty assessed by this order is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that "where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, DNR shall take enforcement action which includes penalties which at least offset the economic benefit." 567 IAC 10.2(1) further states, "reasonable estimates of economic benefit should be made where clear data are not available."

POET has gained an economic benefit from exceeding emission limits on EP S40 and EP S40B through delayed maintenance, delayed control equipment cleaning, and unpermitted process water reuse.

Delaying cleaning and maintenance has allowed POET to realize cost savings from not replacing parts on control equipment and not cleaning out control equipment. The equipment costs have been delayed and labor hours needed to perform the maintenance were avoided. POET installed unpermitted equipment to allow unrestricted use of process water in the scrubber and likely caused fouling and plugging of the fermentation scrubbers. POET Iowa Falls has realized cost

savings by saving water while reducing scrubber control efficiency and causing excess emissions at the facility.

The actual amount of cost savings due to this practice is not known to the DNR but it is likely POET Biorefining profited at least $4,000 from avoiding a shutdown of the process from December 6 through 9, 2021, delayed maintenance and cleaning on EP S40 and EP S40B, and unpermitted installation and operation of equipment to perform process water reuse.

For the reasons stated above, $4,000.00 is assessed for this factor.

Gravity of the Violation – One of the factors to be considered in determining the gravity of a violation is the amount of penalty authorized by the Iowa Code for that type of violation. As indicated above, substantial civil penalties are authorized by statute. Despite the high penalties authorized, DNR has decided to handle the violations administratively at this time, as the most equitable and efficient means of resolving the matter.

Actual harm to the environment and public health likely occurred due to the amount of pollutants that were emitted above the emission limits set forth in construction permits for EP S40 and EP S40B. POET has reported emissions in excess of the permitted emission limits for Methanol, Acetaldehyde, Acrolein, and VOC. The VOC exceedances were reported by POET to be double the combined permitted emission limit of EP S40 and S40B. These pollutants are known to cause adverse health effects.

Furthermore, Acetaldehyde, Acrolein, and Methanol are designated as HAPs. HAPS are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. The gravity of the violation is higher when excess HAP emissions occur.

For the reasons stated above, $3,000.00 is assessed for this factor.

Culpability – POET facility in Iowa Falls has a history of delaying, postponing, and cancelling compliance stack tests on EP S40 and EP S40B, when preliminary emissions test data demonstrates an emission limit exceedance. The facility has now been issued NOVs for this practice in 2016, 2017, 2021, and 2022.

These stack test delays, postponements, and cancellations block DNR's ability to determine if emission points at POET are continuously operating in compliance with the permitted limits. POET continues to employ a practice of conducting preliminary emissions testing to determine emission levels prior to completing compliance stack testing. Additionally, POET's refusal to conduct scheduled compliance tests when the preliminary emissions testing data is unfavorable has prevented DNR from obtaining compliance stack test results to document the

emission levels. For these reasons POET's practice of delaying, postponing, or cancelling of scheduled compliance test dates threatens the integrity of the DNR's air program. Further, as stated above, POET has failed to timely obtain an air quality construction permit prior to installing or operating the process water reuse equipment.

Due to past excess emission events and documented emission limits violations, DNR has required DNR-approved operations and maintenance (O&M) plans for the EP S40 and S40B air pollution control equipment. Failure to maintain the EP S40 and EP S40B control equipment to a point that emission limit violations are more than double the permitted VOC emission limit demonstrates negligence on the facility's behalf.

Due to the nature of the violations, $3,000.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of POET. For that reason, POET waives its right to appeal this order or any part thereof.

VIII. NONCOMPLIANCE

Failure to comply with this administrative consent order, including failure to timely pay any penalty, may result in the imposition of further administrative penalties or referral to the attorney general to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146. Compliance with Section "V. Order" of this administrative consent order constitutes full satisfaction of all requirements pertaining to the specific violations described in Section "IV. Conclusions of Law" of this administrative consent order.

Kayla Lyon

Digitally signed by Kayla Lyon
Date: 2023.05.08 14:54:12 -05'00'

Kayla Lyon, Director
Iowa Department of Natural Resources

POET - Iowa Falls, LLC

Dated this 8th day of May, 2023.

DNR Air Quality Bureau; Field Office 2; Anne Preziosi; VII.A.1, VII.A.2.

Appendix D
Executive Order 10 (EO10) Rules Crosswalk

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	Scope of Title - Definitions	N/A	**Definitions moved** to Ch. 21, 22 and 23. **Rescinded** Ch. 20. (Reserved)
21	**21**	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	**Kept and combined** with rules from Chapters 24, 25, 26, and 29.
22	**22**	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS). **Moved operating permit rules** to Chapter 24.
22.100 - 22.300(12)	**(New) 24**	N/A	Operating Permits	**Moved operating permit rules** from Ch. 22 to Ch. 24.
23	**23**	Emission Standards	Air Emission Standards	**Kept**
24	**(New) 21**	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Moved TV rules** here (to Ch. 24)**.**
25	**(New) 21**	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 25. (Reserved)
26	**(New) 21**	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 26. (Reserved)
27	**27**	Local Program Acceptance	Local Program Acceptance	**Kept**
28	**22**	NAAQS	N/A	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
29	**(New) 21**	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 29. (Reserved)
30	**30**	Fees	Fee	**Kept**
31	**31**	Nonattainment Areas	Nonattainment New Source Review	**Kept**
32	**N/A**	AFO Field Study	N/A	**Rescinded** Ch. 32. (Reserved)
33	**33**	Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)	**Kept**
34	**N/A**	Emissions Trading-CAIR-CAMR	N/A	**Rescinded** Ch. 34. (Reserved)
35	**N/A**	Grant Assistance Programs	N/A	**Rescinded** Ch. 35. (Reserved)

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	**Scope of Title - Definitions**	**N/A**	**Definitions moved** to Ch. 21, 22 and 23. **Rescinded** Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	
21	**21**	**Compliance**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Kept and combined** with rules from Chapters 24, 25, 26, and 29.
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
22	**22**	**Controlling Pollution-Permits**	**Controlling Air Pollution - Construction Permitting**	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS). **Moved operating permit rules** to Chapter 24.
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.6	22.6	Nonattainment area designations	Reserved	

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed
22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed

22.100 - 22.300(12)	**(New) 24**	**N/A**	**Operating Permits**	**Moved operating permit rules** from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revision (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference

22.129	24.129	Information requirements for acid rain permit applications	Information requirements for acid rain permit applications	Moved from Ch. 22, no changes to rule text

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text

23	23	Emission Standards	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the “bubble concept”)	Reserved	Removed

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24	**(New) 21**	**Excess Emissions**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Moved operating permit rules** here (to Ch. 24)**.**
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
25	**(New) 21**	**Emissions Measurement**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 25. (Reserved)
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
26	**(New) 21**	**Emergency Air Pollution Episodes**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
27	**27**	**Local Program Acceptance**	**Local Program Acceptance**	**Kept**
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
28	**22**	**NAAQS**	**N/A**	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	**Moved from Ch. 28**, minor language updated **Rescinded** Ch. 28. (Reserved)
29	**(New) 21**	**Opacity Qualifications**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

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30	**30**	**Fees**	**Fee**	**Kept**
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed
31	**31**	**Nonattainment Areas**	**Nonattainment New Source Review**	**Kept**
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed
32	**N/A**	**AFO Field Study**	**N/A**	**Rescinded** Ch. 32. (Reserved)
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed
33	**33**	**Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality**	**Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)**	**Kept**
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2	33.2	Reserved	Reserved	Kept
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept
33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated

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34	**N/A**	**Emissions Trading-CAIR-CAMR**	**N/A**	**Rescinded** Ch. 34. (Reserved)
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.206	N/A	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed
34.224	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.229	N/A	CAIR NOx ozone season opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.230 - 34.299	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.300	N/A	Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	N/A	Rescinded, reserved, and language removed
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed

34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
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34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed

35	**N/A**	**Grant Assistance Programs**	**N/A**	**Rescinded** Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed