

**Iowa Department of Natural Resources
Title V Operating Permit**

**Name of Permitted Facility: Big River United Energy, LLC -
Dyersville**

Facility Location: 3294 Vine Rd, Dyersville, IA 52040

Air Quality Operating Permit Number: 14-TV-010R2

Expiration Date: 5/1/2029

Permit Renewal Application Deadline: 11/1/2028

EIQ Number: 92-6957

Facility File Number: 28-12-001

Responsible Official

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This permit is issued in accordance with 567 Iowa Administrative Code Chapter 22, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources



05/02/2024

Marnie Stein, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
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: Big River United Energy, LLC – Dyersville
 Permit Number: 14-TV-010R2

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

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
S10	EU 01	DDGS Dryer A	06-A-721-S6
	EU 02	DDGS Dryer B	
	EU 03	DDGS Dryer C	
	EU 04	DDGS Dryer D	
	EU 06	Mixer	
	EU 07	Slurry Tank #1	
	EU 08	Slurry Tank #2	
	EU 09	Cook Tube	
	EU 10	Flash Tank	
	EU 11	Receiver Tank	
	EU 12	Liquefaction Tank #1	
	EU 13	Liquefaction Tank #2	
	EU 14	Yeast Tank #1	
	EU 15	Yeast Tank #2	
	EU 16	Beer Column	
	EU 17	Side Stripper	
	EU 18	Rectifier Column	
	EU 19	190 Proof Condenser	
	EU 20-25	Molecular Sieves (6 Total)	
	EU 26	200 Proof Condenser	
	EU 27-32	Centrifuges #1 - #6	
	EU 33-40	Evaporators #1 - #8	
EU 41	Waste Heat Recovery Boiler B10	06-A-722-S4	
EU 42	Waste Heat Recovery Boiler B11		
EU 43	Truck Receiving Areas		
EU 44	Truck/Rail Receiving Areas		
EU 45	Grain Conveyor		
EU 46	Grain Elevator #1		
EU 47	Grain Silo #1		
EU 48	Grain Silo #2		
EU 49	Emptying Conveyor		
EU 50	Grain Elevator #2		
EU 51	Grain Bin #1		
EU 52	Grain Bin #2		
S25	S25	Elevator Dump Pit	14-A-197

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
S30	EU 53	Hammermill Feed Conveyor	06-A-723-S4
	EU 54-57	Hammermills (4 total)	
S40	EU 58-64	Fermenters (7 total)	06-A-724-S7
	EU 65	Beerwell	
S50	EU 66	Product Loadout Flare and Vapor Recovery System (VRS) Flare	06-A-725-S4
S70	EU 73	Cooling Drum	06-A-727-S2
S80	EU 80	Cooling Tower	06-A-728
S90	EU 74	DDGS Storage Silo #1	06-A729-S2
	EU 75	DDGS Storage Silo #2	
	EU 76	DDGS Dump Pit Auger	
	EU 77	DDGS Loadout Equipment	
S110	S110	Emergency Fire Water Pump	06-A-730
FUG5	FUG5	VOC Emission from Equipment Leaks	06-A-731-S1
FUG6	FUG6	Truck Traffic	06-A-732-S3
T01	T01	190 Proof Ethanol Storage Tank	06-A-733
T02	T02	200 Proof Ethanol Storage Tank	06-A-734
T06	T06	Denaturant Storage Tank	06-A-738
T03	T03	Ethanol Storage Tank #1	06-A-735-S1
T04	T04	Ethanol Storage Tank #2	06-A-736-S1
GRNDRY	GRNDRY	Grain Dryer	14-A-196-S1
S201	S201	Storage Bin	14-A-198
S203	S203	Wet Storage Bin	14-A-199
S204	S204	Storage Bin 2	16-A-058-S1

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU-CI	Corrosion Inhibitor Tank
EU-FUG1	Grain Handling Fugitives
EU-FUG2	DDGS Handling Fugitives
EU-IPV	Insignificant Process Vents
EU-S51	Truck Loadout Rack-Corn Oil
EU-TS-6851	3,500 Gallon Syrup Feed Tank
EU-TS-6852	560 Gallon Syrup Receiver Tank
EU-TS-8901	9,000 Gallon Corn Oil Storage Tank
EU-TS-8902	9,000 Gallon Corn Oil Storage Tank
EU-TS-8903	9,000 Gallon Corn Oil Storage Tank
EU-TS-8904	9,000 Gallon Corn Oil Storage Tank

II. Plant-Wide Conditions

Facility Name: Big River United Energy, LLC - Dyersville
Permit Number: 14-TV-010R2

Permit conditions are established in accord with 567 Iowa Administrative Code rule 22.108

Permit Duration

The term of this permit is: Five (5) years from permit issuance
Commencing on: 5/2/2024
Ending on: 5/1/2029

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 22.110 - 22.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 22.115.

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 (SO₂): 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 on or 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"

NSPS and NESHAP Applicability

The thermal oxidizer/waste heat boilers are subject to the New Source Performance Standard (NSPS) for Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Db; 567 IAC 23.1(2)"ccc").

Some of the emission units at this facility are subject to the requirements of NSPS Subpart A-General Provisions and NSPS Subpart Kb (§60.110b) - 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 of the New Source Performance Standards (NSPS).

Some of the emission units are subject to the requirements/conditions of NSPS Subpart A- General Provisions and NSPS Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry of the New Source Performance Standards (NSPS).

The emergency fire pump engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) and 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Each waste heat recovery boiler at this facility is of the source category affected by 40 CFR Part 63, Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source. However, these units are not subject to Subpart JJJJJ as this federal rule states that waste heat boilers are excluded from the definition of “boiler” in §63.11237.

III. Emission Point-Specific Conditions

Facility Name: Big River United Energy, LLC
 Permit Number: 14-TV-10R2

Emission Point ID Number: EP S10

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity
EU 01	DDGS Dryer A	CE-C10: Thermal Oxidizer 1	Natural Gas	40 MMBtu/hr
EU 02	DDGS Dryer B			40 MMBtu/hr
EU 03	DDGS Dryer C			40 MMBtu/hr
EU 04	DDGS Dryer D			40 MMBtu/hr
EU 06	Mixer	CE-C10: Thermal Oxidizer 1 and CE-C11: Thermal Oxidizer 2	Corn	6,000 lb/min
EU 07	Slurry Tank #1			25,000 gallons
EU 08	Slurry Tank #2			29,000 gallons
EU 09	Cook Tube			5,000 gallons
EU 10	Flash Tank			4,500 gallons
EU 11	Receiver Tank			317 gallons
EU 12	Liquefaction Tank #1			256,800 gallons, total
EU 13	Liquefaction Tank #2			
EU 14	Yeast Tank #1			20,000 gallons
EU 15	Yeast Tank #2			20,000 gallons
EU 16	Beer Column			Vapor Rate: 170,000 lb/hr Liquid Rate: 837,000 lb/hr
EU 17	Side Stripper			Vapor Rate: 36,000 lb/hr Liquid Rate: 102,000 lb/hr
EU 18	Rectifier Column			Vapor Rate: 230,000 lb/hr Liquid Rate: 135,000 lb/hr
EU 19	190 Proof Condenser			52,000 gal/hr
EU 20-25	Molecular Sieves (6 Total)			250 gal/min, total
EU 26	200 Proof Condenser			13,000 gal/hr
EU 27-32	Centrifuges #1 - #6			2,500 gal/min, total
EU 33-40	Evaporators #1 - #8			180 gal/min, total
EU 41	Waste Heat Recovery Boiler B10			None
EU 42	Waste Heat Recovery Boiler B11	None		

DNR Construction Permit: 06-A-721-S6

* Waste Recovery Boilers B10 and B11 do not combust fuel or generate emissions. The emission stream and associated heat from Thermal Oxidizer 1 (CE-C10) is directed to Waste Heat Recovery Boiler B10, which then produces steam from the 122 million Btu per hour maximum heat rate provided by this thermal oxidizer. The same process occurs between Thermal Oxidizer 2 (CE-C11) and the Waste Heat Recovery Boiler B11.

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 06-A-721-S6
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): 5.78 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-721-S6
567 IAC 23.4(7)

Pollutant: PM_{2.5}

Emission Limit(s): 4.89 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 21.92 lb/hr, 500 ppm_v

Authority for Requirement: DNR Construction Permit 06-A-721-S6
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 26.60 lb/hr, 0.1 lb/MMBtu⁽²⁾ - applies to Boilers B10 & B11

Authority for Requirement: DNR Construction Permit 06-A-721-S6
567 IAC 23.1(2)"ccc"
40 CFR 60.44b(a)

⁽²⁾ As indicated in 40 CFR §60.44b(h), this limit applies at all times, including periods of startup, shutdown, and malfunctions. In addition, as indicated in 40 CFR §60.44b(i), compliance with this limit is determined on a 30-day rolling average basis.

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 5.78 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 20.56

Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Acetaldehyde
Emission Limit(s): 0.46 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Acrolein
Emission Limit(s): 0.76 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Formaldehyde
Emission Limit(s): 0.76 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Methanol
Emission Limit(s): 0.76 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-721-S6

Pollutant: Total HAP
Emission Limit(s): 2.14 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-721-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.

THROUGHPUT LIMITS REQUIREMENTS

- A. The total amount of dried distillers' grain with solubles (DDGS) produced at Plant No. 28-12-001 shall not exceed 454,210 tons per rolling 12-month period.
 - i. The owner or operator shall record the total amount of DDGS, in tons, produced at this facility on a monthly basis.
 - ii. The owner or operator shall calculate and record the total amount of DDGS, in tons, produced at this facility on a rolling 12-month basis.

NEW SOURCE PERFORMANCE STANDARDS REQUIREMENTS

- B. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.
 - i. The owner or operator shall maintain records of the following information for each steam generating unit operating day. This information shall be submitted in a report, as required in 40 CFR §60.49b(i).
 - 1. Calendar date;
 - 2. The average hourly NO_x emission (as NO₂) rates measured;
 - 3. The 30-day average NO_x 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;
 - 4. Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emission standard in §60.44b, with the reasons for such excess emissions

- as well as a description of corrective actions taken;
 - 5. 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;
 - 6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - 7. Identification of the “F” factor used for calculations, method of determination, and type of fuel combusted;
 - 8. Identification of the times when the pollutant concentration exceeds full span of the CEMS;
 - 9. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
 - 10. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.
- C. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart VV [§60.480 - §60.489], as specified in the permit issued to Plant Number 28-12-001 for “VOC Emissions from Equipment Leaks.”

CONTROL EQUIPMENT REQUIREMENTS

- D. The burners for the DDGS Dryers (EU-01 through EU-04), Thermal Oxidizer 1 (CE-C10), and Thermal Oxidizer 2 (CE-C11) shall be supplied only natural gas. Organic material (in any phase, gas, liquid, or solid) that is entrained in the exhaust streams of any process equipment vented to this system will also be combusted in the thermal oxidizers.
- E. Thermal Oxidizer 1 (CE-C10) and Thermal Oxidizer 2 (CE-C11) shall be operated at all times that process streams are vented to them and each shall be maintained at a minimum operating temperature of 1450 degrees Fahrenheit (measured as 3-hour averages).
- i. The owner or operator shall continuously collect and record the operating temperature, in degrees Fahrenheit, for each thermal oxidizer.
 - ii. The owner or operator shall calculate and record the operating temperature 3-hour averages, in degrees Fahrenheit, for each thermal oxidizer.
 - 1. If any operating temperature 3-hour average does not comply with the minimum operating temperature of 1450 degrees Fahrenheit, the owner or operator shall investigate and make any necessary corrections.
- F. The owner or operator shall inspect and maintain each thermal oxidizer according to the manufacturer’s specifications and/or the facility’s (Plant No. 28-12-001) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on each thermal oxidizer. At a minimum, this log shall include:
 - 1. The date that 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 the date each issue was resolved;
 - 4. Any actions taken to correct operating temperature malfunctions; and

5. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-721-S6
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 125
Stack Opening, (inches, dia.): 121
Exhaust Flow Rate (scfm): 112,500 – 187,500
Exhaust Temperature (°F): 300
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-721-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 - NO_x
Stack Test to be Completed by (date) – Annually⁽¹⁾
Test Method – 40 CFR 60, Appendix A Method 7E
Authority for Requirement – DNR Construction Permit 06-A-721-S6

⁽¹⁾The NO_x and HAP periodic testing shall be conducted annually with at least 3 months between tests.

Pollutant – HAP⁽²⁾
Stack Test to be Completed by (date) – Annually⁽¹⁾
Test Method – 40 CFR 63, Appendix A Method 320 or
40 CFR 60, Appendix A Method 18
Authority for Requirement – DNR Construction Permit 06-A-721-S6

⁽¹⁾The NO_x and HAP periodic testing shall be conducted annually with at least 3 months between tests.

Pollutant – PM
Stack Test to be Completed by – 5/1/2026
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51 Appendix M Method 202
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – SO₂
Stack Test to be Completed by (date) – 5/1/2026
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – VOC
Stack Test to be Completed by (date) – 5/1/2026
Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement – 567 IAC 22.108(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 25.1(7)

Continuous Emissions Monitoring:

- A. The owner or operator shall comply with the applicable monitoring requirements in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.
 - i. The owner or operator shall continuously monitor emissions of nitrogen oxides (NO_x) discharged to the atmosphere through EP-S10. Therefore, in accordance with 40 CFR §60.48b(b)(1), the owner or operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) or a predictive emission monitoring system (PEMS) for measuring NO_x concentrations from EP-S10.
 - ii. The 1-hour average NO_x emission rates measured by the NO_x CEMS required by 40 CFR §60.48b(b) and §60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission 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. The CEMS required by this permit to monitor NO_x emissions discharged to the atmosphere through EP-S10 shall be operated and the data recorded during all periods of operation including periods of startup, shutdown, malfunction, or emergency conditions, except for CEMS (or PEMS) breakdowns, repairs calibration checks, and zero and span adjustments.
- B. The owner or operator shall follow the procedures in 40 CFR §60.13 for installation, evaluation, and operation of the CEMS.
- C. The CEMS required by this permit to monitor NO_x emissions discharged to the atmosphere through EP-S10 shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) – *Specifications and Test Procedures*

for SO2 and NOx Continuous Emission Monitoring Systems in Stationary Sources and Performance Specification 6 (PS6) – Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources.

- D. The CEMS required by this permit shall comply with the applicable requirements in Appendix F to 40 CFR Part 60 – Quality Assurance Procedures, including, but not limited to the following requirements:
- 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:
 - 1. Calibration of the CEMS;
 - 2. Calibration drift determination and adjustment of the CEMS;
 - 3. Preventive maintenance of the CEMS (including spare parts inventory);
 - 4. Data recording, calculations, and reporting;
 - 5. Accuracy audit procedures including sampling and analysis methods; and
 - 6. 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 shall 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.
 - iv. 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 Construction Permit Condition 12 – *Notification, Reporting, and Recordkeeping*).

Authority for Requirement: DNR Construction Permit 06-A-721-S6

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 operating requirements and associated monitoring and recordkeeping is CAM equivalent.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S20

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 43	Truck Grain Receiving	CE-C20: Baghouse	Corn	40,000 bu/hr, each (2)	06-A-722-S4
EU 44	Rail Grain Receiving			40,000 bu/hr	
EU 45	Storage Conveyor			40,000 bu/hr	
EU 46	Grain Elevator #1			40,000 bu/hr	
EU 47	Grain Silo #1			500,000 bushels	
EU 48	Grain Silo #2			500,000 bushels	
EU 49	Emptying Conveyor			15,000 bu/hr	
EU 50	Grain Elevator #2			40,000 bu/hr	
EU 51	Grain Day Bin #1			27,000 bu/hr	
EU 52	Grain Day Bin #2			9,000 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%

Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.65 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-722-S4
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.

THROUGHPUT LIMITS REQUIREMENTS

- A. The total amount of grain received at Plant No. 28-12-001 shall not exceed 52,800,000 bushels per rolling twelve-month period.
 - i. The owner or operator shall record the total amount of grain, in bushels, received at this facility on a monthly basis.
 - ii. The owner or operator shall calculate and record the total amount of grain, in bushels, received at this facility on a rolling 12-month basis.

CONTROL EQUIPMENT REQUIREMENTS

- B. The owner or operator shall inspect and maintain the baghouse (CE-C20) according to the manufacturer's specifications and/or the facility's (Plant No. 28-12-001) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (CE-C20). At a minimum, this log shall include:
1. Weekly pressure drop across the baghouse (CE-C20);
 2. The date that any inspection and/or maintenance was performed on the control equipment;
 3. Any issues identified during the inspection;
 4. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 5. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-722-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 160

Stack Opening, (inches, dia.): 48

Exhaust Flow Rate (scfm): 40,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-722-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:

Pollutant - PM

Stack Test to be Completed by – 5/1/2026

Test Method – 40 CFR 60, Appendix A, Method 5

40 CFR 51 Appendix M Method 202

Authority for Requirement: 567 IAC 22.108(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 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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S25

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU S25	Elevator Dump Pit	CE-C25: Baghouse	Corn	20,000 bu/hr	14-A-197

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 14-A-197
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): 1.68 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 14-A-197
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 0.42 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-197

Pollutant: PM_{2.5}

Emission Limit(s): 0.07 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-197

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 permittee shall operate and maintain the control device (CE-C25) associated with the Elevator Dump Pit (EU-S25) in accordance with manufacturer's specifications.
- B. The permittee shall keep records of all maintenance and repairs to the control device (CE-C25) associated with the Elevator Dump Pit (EU-S25).

Authority for Requirement: DNR Construction Permit 14-A-197

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 25

Stack Opening, (inches, dia.): 45.6

Exhaust Flow Rate (scfm): 49,000

Exhaust Temperature (°F): 68

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 14-A-197

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

A CAM plan is attached in Appendix C.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S30

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 53	Hammer Mill Feed Conveyor	CE-C30: Baghouse	Corn	10,000 bu/hr	06-A-723-S4
EU 54	Hammer Mill #1			3,570 bu/hr	
EU 55	Hammer Mill #2			3,570 bu/hr	
EU 56	Hammer Mill #3			3,570 bu/hr	
EU 57	Hammer Mill #4			3,570 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 06-A-723-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): 0.96 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-723-S4
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 inspect and maintain the baghouse (CE-C30) according to the manufacturer’s specifications and/or the facility’s (Plant No. 28-12-001) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (CE-C30). At a minimum, this log shall include:
 1. Weekly pressure drop across the baghouse (CE-C30);
 2. The date that any inspection and/or maintenance was performed on the control equipment;
 3. Any issues identified during the inspection;
 4. Any issues addressed during the maintenance activities and the date each issue was resolved; and

5. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-723-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 160

Stack Opening, (inches, dia.): 40

Exhaust Flow Rate (scfm): 21,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-723-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 22.108(3)

Emission Point ID Number: EP S40

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 58	Fermenter #1	CE-C40: Packed Bed Scrubber	Corn	807,000 gallons	06-A-724-S7
EU 59	Fermenter #2			807,000 gallons	
EU 60	Fermenter #3			807,000 gallons	
EU 61	Fermenter #4			807,000 gallons	
EU 62	Fermenter #5			807,000 gallons	
EU 63	Fermenter #6			807,000 gallons	
EU 64	Fermenter #7			807,000 gallons	
EU 65	Beer Well			1.08 million gallons	

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 06-A-724-S7
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): 0.82 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-724-S7
567 IAC 23.4(7)

Pollutant: PM_{2.5}

Emission Limit(s): 0.33 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-724-S7

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 12.37 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-724-S7

Pollutant: Acetaldehyde

Emission Limit(s): 1.28 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-724-S7

Pollutant: Single HAP⁽²⁾

Emission Limit(s): 0.15 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-724-S7

⁽²⁾ Limit applies to each single HAP except for Acetaldehyde.

Pollutant: Total HAP

Emission Limit(s): 1.77 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-724-S7

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 scrubber according to the parameters (scrubber liquid flow rate, additive feed rate, and recycle water rate) that is established during the seasonal performance testing required in Construction Permit Condition 2 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 shall maintain an average pressure drop across the Packed Bed Scrubber (CE-C40) that is greater than 1.5 inches water column based on a 24-hour averaging period.
 - a. The owner or operator shall record the scrubber pressure drop, in inches water column, across the Packed Bed Scrubber (CE-C40) on a continuous basis.
 - b. The owner or operator shall calculate and record the average pressure drop, in inches water column, across the Packed Bed Scrubber (CE-C40) on a 24-hour averaging period.
 - i. If the average pressure drop deviates below the minimum required, the owner or operator shall record the time, date, and actions taken to correct the situation. The owner or operator shall also record when the pressure drop across the Packed Bed Scrubber (CE-C40) has returned to or above the minimum average pressure drop required.
 - c. The owner or operator shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across the scrubber of 1.5 inches water column or less. On those days when there is an alarm for the pressure drop reaching 1.5 inches water column or less, the owner or operator shall calculate and record the average pressure drop, in inches water column, across the scrubber based on a 24-hour averaging period. This requirement shall not apply on the days that the Packed Bed Scrubber (CE-C40) is not in operation or during facility start-

- up, shutdown, or during operation at less than 50% capacity.
- C. The fermentation process may operate under either the **Scrubber Recycle Operating Scenario** or the **Scrubber Non-Recycle Operating Scenario**. The scrubber liquid (water) flow rate, recycle water flow rate, and additive rate (for both scenarios) must be set by the rates determined during the most recent stack test demonstrating compliance for each operating scenario.
 - D. The owner or operator shall record when the Packed Bed Scrubber (CE-C40) is operating in the **Scrubber Recycle Scenario** or the **Scrubber Non-Recycle Scenario**.
 - E. The Packed Bed Scrubber (CE-C40) shall have a minimum scrubbing liquid flow rate at or above the average scrubbing liquid flow rate at the inlet to the scrubber measured during the most recent stack test for each operating scenario (**Scrubber Recycle Scenario** or the **Scrubber Non-Recycle Scenario**) that demonstrated compliance with all applicable emission limitations.
 - a. The owner or operator shall record the scrubbing liquid flow rate on a continuous basis.
 - b. The owner or operator shall calculate and record the average scrubbing liquid flow rate based on a 3-hour averaging period. If the average scrubbing liquid flow rate deviates below the minimum required, the owner or operator shall record the time, date, and actions taken to correct the situation. The owner or operator shall also record when the scrubbing liquid flow rate has returned to or above the minimum average scrubbing liquid flow rate required.
 - F. The Packed Bed Scrubber (CE-C40) shall have a minimum recycle liquid flow rate at or above the average recycle liquid flow rate measured during the most recent stack test for each operating scenario (**Scrubber Recycle Scenario** or the **Scrubber Non-Recycle Scenario**) that demonstrated compliance with all applicable emission limitations.
 - a. The owner or operator shall record the recycle liquid flow rate on a continuous basis.
 - b. The owner or operator shall calculate and record the average recycle liquid flow rate based on a 3-hour averaging period. If the average recycle liquid flow rate deviates below the minimum required, the owner or operator shall record the time, date, and actions taken to correct the situation. The owner or operator shall also record when the recycle liquid flow rate has returned to or above the minimum average recycle liquid flow rate required.
 - G. The additive feed rate to the Packed Bed Scrubber (CE-C40) shall be maintained at or above the average feed rate observed during the most recent stack test for each operating scenario (**Scrubber Recycle Scenario** or the **Scrubber Non-Recycle Scenario**) that demonstrated compliance with all applicable emission limitations.
 - a. The owner or operator shall record the additive feed rate on a continuous basis.
 - b. The owner or operator shall calculate and record the average additive feed rate based on a 3-hour averaging period. If the average additive feed rate deviates below the minimum required, the owner or operator shall record the time, date, and actions taken to correct the situation. The owner or operator shall also record when the additive feed rate has returned to or above the minimum average additive feed rate required.
 - H. The owner or operator shall maintain on-site a copy of the most recent stack test report detailing pressure drop, scrubbing liquid flow rate, and additive feed rate measured during the most recent stack test that demonstrated compliance with the applicable emission limitations.

- I. The owner or operator shall inspect and maintain the Packed Bed Scrubber (CE-C40) according to the manufacturer's specifications and/or the facility's (Plant No. 28-12-001) operation and maintenance plan. The owner or operator shall keep a log of all maintenance and inspection activities performed on the Packed Bed Scrubber (CE-C40). At a minimum, this log shall include:
 - a. The date that any inspection and/or maintenance was performed on the Packed Bed Scrubber (CE-C40);
 - b. Any issues identified during the inspection;
 - 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.
- J. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart VV [§60.480 - §60.489], as specified in the permit issued to Plant Number 28-12-001 for "VOC Emissions from Equipment Leaks".

Authority for Requirement: DNR Construction Permit 06-A-724-S7
 40 CFR 60 Subpart VV
 567 IAC 23.1(2)"nn"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 75
 Stack Opening, (inches, dia.): 27
 Exhaust Flow Rate (scfm): 15,000
 Exhaust Temperature (°F): 70
 Discharge Style: Vertical, Unobstructed
 Authority for Requirement: DNR Construction Permit 06-A-724-S7

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 – VOC
 Stack Test to be Completed by (date) – Annual⁽¹⁾⁽²⁾⁽³⁾
 Test Method – 40 CFR 63, Appendix A, Method 320 or
 40 CFR 60, Appendix A, Method 18
 Authority for Requirement – DNR Construction Permit 06-A-724-S7

Pollutant – HAP

Stack Test to be Completed by (date) – Annual⁽¹⁾⁽²⁾⁽³⁾⁽⁴⁾

Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18

Authority for Requirement – DNR Construction Permit 06-A-724-S7

⁽¹⁾ The facility shall conduct annual stack testing for the qualifying seasonal period covering the months of May through September (summer), as described in Operational Limit A. Stack testing shall be conducted during the months of June, July, or August for this period. The facility shall use those tests that demonstrate compliance with the permitted emission limits above to establish the scrubber liquid flow rate, additive feed rate, and recycle water rate for each month of operation, as detailed in the Operational Limits. The next test must be completed by August 31, 2024.

⁽²⁾ The facility shall conduct annual stack testing for the qualifying seasonal period covering the months of October through April (winter), as described in Operational Limit A. The facility shall use those tests that demonstrate compliance with the permitted emission limits above to establish the scrubber liquid flow rate, additive feed rate, and recycle water rate for each month of operation, as detailed in the Operational Limits. The next test must be completed by April 30, 2024 (Completed 11/24/2023).

⁽³⁾ If 3 consecutive annual winter seasonal tests are less than 90% of the applicable emission limitations, the facility may request to change the winter seasonal stack testing frequency to once every three years.

⁽⁴⁾ Acetaldehyde, acrolein, formaldehyde, and methanol shall be tested for specifically. The specified HAP that tests below the detection limit shall be assumed to be emitting at a rate equal to the detection limit.

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 operating requirements and associated monitoring and recordkeeping is CAM equivalent.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S50

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Construction Permit
EU 66	Truck Ethanol Product Loadout	CE-C50: Vapor Recovery System and Enclosed Flare, 12.4 MMBtu/hr	Natural Gas, Fugitive Ethanol Vapor	06-A-725-S4
	Rail Ethanol Product Loadout			

Rated Capacity: Truck Ethanol Product Loadout – 600 gal/min

Rail Ethanol Product Loadout – 1,500 gal/min

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 06-A-725-S4
567 IAC 23.3(2)"d"

⁽¹⁾The flare (CE-C50) shall operate with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours. Therefore, outside of these periods, an exceedance of the indicator opacity of "no visible emissions" will require the owner or operator to promptly investigate the emission unit(s) 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): 0.44 tons/yr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-725-S4
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 06-A-725-S4
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 3.72 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-725-S4

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 12.25 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-725-S4

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 20.13 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-725-S4

Pollutant: Total HAP

Emission Limit(s): 1.47 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-725-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.

EQUIPMENT OPERATION and THROUGHPUT LIMITS REQUIREMENTS

- A. The owner or operator shall only receive natural gasoline to be used as an ingredient or denaturant in the fuel ethanol product loaded out at Plant Number 28-12-001.
 - i. The owner or operator shall maintain on-site records demonstrating the type of ingredient or denaturant received at Plant Number 28-12-001, including, but not limited to, manufacturer/vendor provided information (Safety Data Sheets, technical data sheets, etc.), Certificate of Analysis, etc.
- B. The total amount of ethanol product loaded out at Plant Number 28-12-001 shall not exceed 140 million gallons per twelve-month rolling period.
 - i. The owner or operator shall record the total amount of ethanol product, in gallons, loaded out at this facility on a monthly basis.
 - ii. The owner or operator shall calculate and record the total amount of ethanol product, in gallons, loaded out at this facility on a rolling 12-month basis.
- C. The total amount of natural gasoline used as a fuel ethanol ingredient shall not exceed 7 million gallons per rolling twelve-month period.
 - i. The owner or operator shall record the total amount of natural gasoline, in gallons, used as a fuel ethanol ingredient on a monthly basis.
 - ii. The owner or operator shall calculate and record the total amount of natural gasoline, in gallons, used as fuel ethanol ingredient on a rolling 12-month basis.
- D. Operation at the truck and rail loadout shall be conducted as follows:
 - i. The flare (CE-C50) shall be operated whenever ethanol product is loaded out through the truck or rail loadout.
 - ii. Truck loadouts may be switch-loaded, i.e., filled with ethanol product when the previous tank load was gasoline.
 - iii. The maximum amount of ethanol product loaded through the truck loading rack shall not exceed 45 million gallons per twelve-month rolling period.
 - 1. The owner or operator shall record the total amount of ethanol product, in gallons, loaded out through the truck loading rack on a monthly basis.
 - 2. The owner or operator shall calculate and record the total amount of ethanol product, in gallons, loaded out through the truck loading rack on a rolling 12-month basis.
 - iv. All rail loadouts shall be dedicated tank cars, i.e., no switch-loading.
- E. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart VV [§60.480 - §60.489], as specified in the permit issued to Plant Number 28-12-001 for “VOC Emissions from Equipment Leaks.”

CONTROL EQUIPMENT REQUIREMENTS

- F. The flare (CE-C50) shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

- G. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.
- H. The owner or operator shall continuously verify the output of the flame detection system indicating the presence of a flame, while loading.
- I. The owner or operator shall inspect and maintain the flare (CE-C50) according to the manufacturer's specifications and/or the facility's (Plant No. 28-12-001) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on flare (CE-C50). At a minimum, this log shall include:
 1. The date that 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 the date each issue was resolved; and
 4. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-725-S4
 40 CFR 60 Subpart VV
 567 IAC 23.1(2)"nn"

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): 8,000

Exhaust Temperature (°F): 1,800

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-725-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

The requirements of the operating requirements and associated monitoring and recordkeeping is CAM equivalent.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S70

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 73	DDGS Cooling Drum	CE-C70: Baghouse	DDGS	44.4 tph	06-A-727-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: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-727-S2
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): 1.03 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-727-S2
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 1.03 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-727-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 2.41 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-727-S2

Pollutant: Individual HAP⁽²⁾

Emission Limit(s): 0.06 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-727-S2

⁽²⁾The specific Individual HAP are primarily acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately and does not represent the sum of these HAPs.

Pollutant: Total HAP

Emission Limit(s): 0.19 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-727-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 inspect and maintain the control equipment according to manufacturer’s specifications.
- B. The owner or operator shall keep records of control equipment inspections and repairs. This shall include the following:
 - i. The date the inspection or repair work was initiated;
 - ii. A description of the repair work done;
 - iii. Identification of any issues noted during an inspection;
 - iv. Identification of staff member performing the work or inspection.

Authority for Requirement: DNR Construction Permit 06-A-727-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 48

Stack Opening, (inches, dia.): 48

Exhaust Flow Rate (scfm): 9,500

Exhaust Temperature (°F): 110

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-727-S2

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.

Agency Approved Operation & Maintenance Plan Required? Yes No

An Agency O&M plan is included in Appendix B.

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S80

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU 80	Cooling Tower	Cooling Water	3,000,000 gph	06-A-728

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 06-A-728
567 IAC 23.3(2)"d"

⁽¹⁾ An exceedance of the indicator opacity of 10% 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): 3.12 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-728
567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit(s): 3.12 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-728

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 2,500 parts per million (ppm) total dissolved solids (TDS). Monitoring of the TDS shall be conducted on a monthly schedule.
- B. The cooling tower shall be operated and maintained per the manufacturer's specifications and instructions.
- C. 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.
- D. Maintain records of all maintenance and repair to the cooling tower.

Authority for Requirement: DNR Construction Permit 06-A-728

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): NA

Stack Opening, (inches, dia.): 304

Exhaust Flow Rate (scfm): 3,034,076

Exhaust Temperature (°F): 85

Discharge Style: Vertical

Authority for Requirement: DNR Construction Permit 06-A-728

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 22.108(3)

Emission Point ID Number: EP S90

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU 74	DDGS Storage Silo #1	CE-C90: Baghouse	DDGS	4,000 tons	06-A-729-S2
EU 75	DDGS Storage Silo #2			4,000 tons	
EU 76	DDGS Dump Pit Auger			240 tph	
EU 77	DDGS Loadout Equipment			240 tph	

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 06-A-729-S2
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): 0.39 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-729-S2
567 IAC 23.4(7)

Pollutant: PM_{2.5}

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Acetaldehyde

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Acrolein

Emission Limit(s): 0.18 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Formaldehyde

Emission Limit(s): 0.18 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Methanol
Emission Limit(s): 0.18 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-729-S2

Pollutant: Total HAP
Emission Limit(s): 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-729-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 inspect and maintain the baghouse according to the facility's (Plant No. 28-12-001) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse. This log shall include, but shall not limited to:
 - i. Daily pressure drop;
 - ii. The date that any inspection and/or maintenance was performed on the control equipment;
 - iii. Any issues identified during the inspection;
 - iv. Any issues addressed during the maintenance activities; and
 - v. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-729-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 40
Stack Opening, (inches, dia.): 26
Exhaust Flow Rate (scfm): 6,500
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-729-S2

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 22.108(3)

Emission Point ID Number: EP S110

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU S110	Emergency Fire Water Pump	Diesel	300 bhp	06-A-730

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 06-A-730
567C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% 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): 0.71 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-730
567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit(s): 0.71 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-730

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.67 lb/hr, 2.5 lb/MMbtu

Authority for Requirement: DNR Construction Permit 06-A-730

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.1 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-730

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.81 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-730

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 2.20 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-730

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 fuel shall be limited to #1 or #2 diesel only with a sulfur content not to exceed 0.5% by weight.
- B. The fire water pump shall not operate more than 500 hours per twelve month rolling period.
- C. Maintain records as to the type of fuel oil used.
- D. Record the number of hours the fire pump operated per twelve-month rolling period.

Authority for Requirement: DNR Construction Permit 06-A-730

NEHSAP and NSPS Applicability

NESHAP:

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(2)(iii) this emergency engine, located at an area source, is a new stationary RICE as it was constructed on or after June 12, 2006.

According to 40 CFR 63.6590(c)(1), a new stationary RICE located at an area source of HAP emissions must meet the requirements of Part 63 by meeting the requirements of 40 CFR part 60 subpart IIII for compression ignition engines (or 40 CFR part 60 subpart JJJJ for spark ignition engines). No further requirements apply for this engine under Part 63.

NSPS:

Emission Standards:

According to 40 CFR 60.4205(c) and Table 4 to Subpart IIII, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NOx	CO	PM
130 ≤ kW ≤ 560 (175 ≤ HP ≤ 750)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)

⁽¹⁾ For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

⁽²⁾ For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

Fuel Requirements:

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

Compliance Requirements:

1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
 - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
 - b) Changing only those emission-related settings that are permitted by the manufacturer; and
 - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
2. You must demonstrate compliance with the applicable emission standards according to one of the following methods. 40 CFR 60.4211(b).
 - a) Purchasing an engine certified according to 40 CFR 89 or 40 CFR 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Subpart IIII and these methods must have been followed correctly.
 - c) Keeping records of engine manufacturer data indicating compliance with the standards.
 - d) Keeping records of control device vendor data indicating compliance with the standards.
 - e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.
3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
100 ≤ HP ≤ 500	Within 1 year of engine startup, or non-permitted action ⁽¹⁾	Not required

⁽¹⁾ Non-permitted action means that you do not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer.

Operating and Recordkeeping Requirements

1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

Engine power	Starting model year
$19 \leq \text{KW} < 56$ ($25 \leq \text{HP} < 75$)	2013
$56 \leq \text{KW} < 130$ ($75 \leq \text{HP} < 175$)	2012
$130 \leq \text{KW}$ ($175 \leq \text{HP}$)	2011

2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"
40 CFR Part 60 Subpart III
567 IAC 23.1(2)"yyy"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 8
Stack Opening, (inches, dia.): 3
Exhaust Flow Rate (scfm): 750
Exhaust Temperature (°F): 770
Discharge Style: Vertical w/o rain cap or w/ unobstructing rain cap
Authority for Requirement: DNR Construction Permit 06-A-730

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 22.108(3)

Emission Point ID Number: EP FUG5

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU FUG5	VOC Emission from Equipment Leaks	CE FUG5: Leak Detection and Repair Program	VOC Leaks	NA	06-A-731-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.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-731-S1
567 IAC C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% 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): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-731-S1
567 IAC 23.3(2)"a"

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 VOC emissions from the equipment leaks at this facility shall not exceed 12.56 tons per twelve (12) month period, rolled monthly.
- B. The component count shall be documented as to the number and types of components used. Components include but are not limited to valves, pumps, compressor seals, flanges, etc. The component count shall be updated as the component count varies.
- C. The owner or operator shall follow the applicable standards of NSPS Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.
- D. Calculate and record the VOC and HAP emissions based on the documented component count. Update annualized VOC and HAP emission calculations as the component count varies. Emission factors shall be used from Table 2-1 of EPA document 453/R-95-017 entitled Protocol for Equipment Leak Emission Estimates. Control efficiency shall be used from Table 5-2 for quarterly monitoring. For calculating emissions from Pressure Release Devices, emission factors shall be used from Table 2-9 of EPA document 453/R-95-017 entitled Protocol for Equipment Leak Emission Estimates.
- E. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487

Authority for Requirement: DNR Construction Permit 06-A-731-S1
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

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 22.108(3)

Emission Point ID Number: EP FUG6

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Construction Permit
EU FUG6	Truck Traffic	CE FUG6: Sweeping/ Flushing	06-A-732-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): A limit of “no visible emissions” at the property line shall be required for this activity.

Authority for Requirement: DNR Construction Permit 06-A-732-S3
567 IAC C 23.3(2)"d"

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 haul road shall be paved prior to the receipt of any grain.
- B. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.
- C. Any spills on the road shall be cleaned up immediately.
- D. The silt loading on the surface of the paved haul roads shall not exceed 0.4 grams per square meter.
- E. Silt load performance testing shall be completed once each calendar quarter with a minimum of 45 days between each test. Testing shall be completed prior to surface cleaning for that day. Sampling associated with this testing shall be performed in at least 3 locations throughout the facility. Sampling shall be completed using methods outlined in USEPA’s AP-42 Appendix C-1.
- F. The owner/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. The owner/operator shall maintain a log of all surface cleaning that is performed on the roads. This log shall include, but not be limited to:
 - i. The date and time any surface cleaning operation starts;
 - ii. A description of the operation that is undertaken;
 - iii. Any relevant operating data (IE, amount of water used, etc)
 - iv. Identification of personnel performing operations.
- H. The plant shall maintain a log for the haul roads that show the monthly vehicle miles traveled (VMT) on site.
- I. The owner/operator shall maintain silt load sampling results for each sample taken.

Authority for Requirement: DNR Construction Permit 06-A-732-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 22.108(3)

Emission Point ID Number: EP T01, EP T02, and EP T06

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP T01	EU T01	190 Proof Ethanol Storage Tank	CE-T01: Internal Floating Roof	190 Proof Ethanol	200,000 gallons	06-A-733
EP T02	EU T02	200 Proof Ethanol Storage Tank	CE-T02: Internal Floating Roof	200 Proof Ethanol	200,000 gallons	06-A-734
EP T06	EU T06	Denaturant Tank	CE-T06: Internal Floating Roof	Denaturant	200,000 gallons	06-A-738

Applicable Requirements

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

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

There are no emission limits for these units at this time.

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 storage tank (EU T01) shall only store 190 Proof ethanol and the storage tank (EU T02) shall only store 200 Proof ethanol. The storage tank (EU T06) 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 each 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 Permit 06-A-733, 06-A-734, and 06-A-738
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Exhaust Flow Rate (scfm): Working & Breathing Losses

Exhaust Temperature (°F): Ambient

Authority for Requirement: DNR Construction Permit 06-A-733, 06-A-734, and 06-A-738

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 22.108(3)

Emission Point ID Number: EP T03 and EP T04

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP T03	EU T03	Ethanol Storage Tank #1	CE-T03: Internal Floating Roof	200 Proof Ethanol or denatured ethanol only	1,500,000 gallons	06-A-735-S1
EP T04	EU T04	Ethanol Storage Tank #2	CE-T04: Internal Floating Roof		1,500,000 gallons	06-A-736-S1

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permits 06-A-735-S1 & 06-A-736-S1
567 IAC C 23.3(2)"d"

⁽¹⁾An exceedance of the indicator opacity of 10% 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): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 06-A-735-S1 & 06-A-736-S1
567 IAC 23.3(2)"a"

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 tank shall store 200-proof ethanol or denatured ethanol only.
- 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 Permit 06-A-735-S1 and 06-A-736-S1
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Exhaust Flow Rate (scfm): The air flow from this unit is the natural draft caused by working and standing losses from the tank. The actual flow rate will be dependent on ambient and process conditions.

Exhaust Temperature (°F): Ambient

Authority for Requirement: DNR Construction Permit 06-A-733 and 06-A-734

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 22.108(3)

Emission Point ID Number: EP GRNDRY

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU GRNDRY	Grain Dryer	Corn Natural Gas	365 tons/hr 100.75 MMBtu/hr	14-A-196-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.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 14-A-196-S1
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): 81.1 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 14-A-196-S1
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 20.8 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-196-S1

Pollutant: PM_{2.5}

Emission Limit(s): 4.2 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-196-S1

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm_v

Authority for Requirement: DNR Construction Permit 14-A-196-S1

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 10.1 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-196-S1

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 burner associated with the Grain Dryer (EU-GRNDRY) shall combust natural gas only.
 - B. The Grain Dryer (EU-GRNDRY) shall operate no more than 2,000 hours per each 12-month rolling period.
 - C. The amount of grain processed by the Grain Dryer (EU-GRNDRY) shall not exceed 10,000,000 bushels (280,000 tons) per each 12-month rolling period.
 - D. The owner or operator shall maintain monthly and 12-month rolling totals of the number of hours that the Grain Dryer (EU-GRNDRY) operates.
 - E. The owner or operator shall maintain monthly and 12-month rolling totals of the amount of grain, in tons, that the Grain Dryer (EU-GRNDRY) processes.
- Authority for Requirement: DNR Construction Permit 14-A-196-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Exhaust Flow Rate (scfm): 441,285
 Exhaust Temperature (°F): 90
 Authority for Requirement: DNR Construction Permit 14-A-196-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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S201 & EP S203

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP S201	EU S201	Storage Bin 1	CE-C201: Baghouse	Corn	1,180,000 bushels	14-A-198
EP S203	EU S203	Wet Storage Bin 1	CE-C203: Baghouse	Corn	185,000 bushels	14-A-199

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 14-A-198 and 14-A-199
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): 0.10 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 14-A-198 and 14-A-199
567 IAC 23.4(7)"c"

Pollutant: PM₁₀

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-198 and 14-A-199

Pollutant: PM_{2.5}

Emission Limit(s): 0.02 lb/hr

Authority for Requirement: DNR Construction Permit 14-A-198 and 14-A-199

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 permittee shall operate and maintain the control device (CE-C201) associated with the Storage Bin 1 (EU-S201) and control device (CE-C203) associated with the Wet Storage Bin 1(EU-S203) accordance with manufacturer’s specifications.
- B. The permittee shall keep records of all maintenance and repairs to the control device (CE-C201) associated with the Storage Bin 1 (EU-S201) and control device (CE-C203) associated with the Wet Storage Bin 1(EU-S203).

Authority for Requirement: DNR Construction Permit 14-A-198 and 14-A-199

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 25

Stack Opening, (inches, dia.): 30

Exhaust Flow Rate (scfm): 3,000

Exhaust Temperature (°F): 68

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 14-A-198 & 14-A-199

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 22.108(3)

Emission Point ID Number: EP S204

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU S204	Storage Bin 2	CE-CS204: Baghouse	Corn	1,180,000 bushels	16-A-058-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.

Pollutant: Opacity

Emission Limit(s): 40%⁽¹⁾

Authority for Requirement: DNR Construction Permit 16-A-058-S1
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): 0.24 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 16-A-058-S1
567 IAC 23.4(7)"c"

Pollutant: PM_{2.5}

Emission Limit(s): 0.01 lb/hr

Authority for Requirement: DNR Construction Permit 16-A-058-S1

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 baghouse according to the facility's (Plant No. 28-12-001) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse. This log shall include, but shall not limited to:
 - i. Daily pressure drop;
 - ii. The date that any inspection and/or maintenance was performed on the control equipment;
 - iii. Any issues identified during the inspection;
 - iv. Any issues addressed during the maintenance activities; and
 - v. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 16-A-058-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 30
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 16-A-058-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

Authority for Requirement: 567 IAC 22.108(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 chapter 22.

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 22.108(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 22.105 (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 22.108 (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 22.108 (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 22.108 (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 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(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—22.105(455B). *567 IAC 22.116(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 to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 6200 Park Avenue, Suite 200, Des Moines, IA 50321, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. 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 22.105(2). *567 IAC 22.105*

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 22.107 (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 22.108 (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 22.107(4)*. The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule *567 IAC 22.106* 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 22.115(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 22.108 (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 22.108 (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 24.2(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 22.108(4), 567 IAC 22.108(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 22;
 - b. Compliance test methods specified in 567 Chapter 25; 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 22.108(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 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(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 24.1(1)-567 IAC 24.1(4)

3. **Emergency Defense for Excess Emissions.** For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly

designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

- a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- b. The facility at the time was being properly operated;
- c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and
- d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. *567 IAC 22.108(16)*

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 22.108(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 22.
 - 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—22.140(455B) through 567 -

22.144(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 22.110(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 22.110(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 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(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 22.110(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 22.108(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 - 22.113(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 22.107(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 22.107(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 22.112(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 22, 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 22.111-567 IAC 22.113*

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. Exceedences 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 22.108(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 22.108(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 22.108(17)"a", 567 IAC 22.108(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 22.114(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 22.114(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 22.114(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 22.108 (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 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (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 22.111(1)*. *567 IAC 22.111 (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 22.3(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 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 Avenue, Suite 200
Des Moines, IA 50321
(515) 725-9545

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 25.1(7)"a", 567 IAC 25.1(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 Avenue, Suite 200
Des Moines, IA 50321
(515) 725-8200

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

40 CFR 60 Subpart A – General Provisions.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A>

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Kb>

40 CFR 60 Subpart Db – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Db>

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII>

40 CFR 60 Subpart VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VV>

40 CFR 63 Subpart A – General Provisions

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A>

40 CFR 63 Subpart ZZZZ – National Emissions Standards 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>

40 CFR 63 Subpart JJJJJ – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Source.

<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-JJJJJ>

Appendix B

Agency Operations and Maintenance Plan for Reverse Air Baghouses Control Equipment: CE-C70

Daily

Check and document the baghouse pressure drop (0.1 - 6" w.g.). If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within 8 hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection. Maintenance and inspection records will be kept for five years and available upon request.

Weekly

Check and document the baghouse pressure drop (0.1 - 6" w.g.). If the pressure drop falls out of the normal operating range, specified by the manufacturer, corrective action will be taken within 8 hours to return the pressure drop to normal.

Maintain a written record of the observation and any action resulting from the inspection. Maintenance and inspection records will be kept for five years and available upon request.

Appendix C - CAM

**COMPLIANCE ASSURANCE MONITORING PLAN:
BIG RIVER UNITED ENERGY, LLC
EMISSION UNIT: S25
EIQ NUMBER: 92-6957**

I. Background

Emissions Unit (S25):

Description: Elevator Dump Pit (20,000 bushels per hour)
STACK ID: S25
Control: Baghouse (ID: CE-C25)
Limits: PM limit – 1.68 lb/hr

II. Monitoring Approach

See Table 1 – A reportable excursion occurs whenever the indicator range or parameter is exceeded for the prescribed monitoring period.

MONITORING APPROACH JUSTIFICATION

A. Background

The facility purchases grain (primarily corn) which is converted to ethanol via natural fermentation. The final products are sold and include fuel ethanol, and animal feed, such as Dried Distillers Grains and Solubles (DDGS). Hammermilling operations result in the generation of PM, PM₁₀ and PM_{2.5} emissions. As such baghouses to control these emissions are employed to minimize release.

B. Rationale for Selection of Performance Indicators

Baghouses (or fabric filters) are standard PM, PM₁₀ and PM_{2.5} emission controls from grain processing operations creating particulate emissions and are typically cited as best available control technology (BACT) for such applications. Baghouses operate by collecting particulate on porous fabric bags, thus resulting in a pressure differential across the system. The pressure is required as 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 of the system is the best indicator of baghouse performance.

C. Rationale for Selection of Indicators

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 then returned to the manufacturing process. Baghouses are highly efficient for controlling filterable PM, PM₁₀ and PM_{2.5} and are typically considered BACT for such applications with control efficiencies from 97 to 99 percent or more in most applications. The baghouse manufacturer typically guarantees a control efficiency of 99% for this source. Baghouses are subject to failure if they are not properly operated and maintained. All excursions will be documented. An indicator pressure drop range of -0.3 to 8.0 inches of water column is recommended to achieve the required control efficiency.

TABLE 1 – MONITORING APPROACH

	Indicator #1
I. Indicator	Differential pressure across baghouse
Monitoring Approach	Differential pressure measured across the baghouse by a magnehelic pressure gauge will be recorded at least once per day.
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable range is -0.3 – 8 inches water column or a range established by the IDNR. Excursions trigger an inspection, corrective action, and a recordkeeping requirement.
III. Performance Criteria	
A. Data Representativeness	The differential pressure is measured across the baghouse.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer’s specifications.
C. QA/QC Practice and Criteria	Pressure gauges will be calibrated, operated, and maintained according to the manufacturer’s specifications.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per week when the baghouse is operating.
E. Data Collection Procedures	Pressure drop is manually or electronically recoded. The observation includes the observation date, time, and pressure drop reading.
F. Averaging Period	None.