

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

Name of Permitted Facility: Green Plains Superior, LLC

Facility Location: 1495 320th Ave., Superior, IA 51363

Air Quality Operating Permit Number: 13-TV-005R2

Expiration Date: 11/15/2028

Permit Renewal Application Deadline: 5/15/2028

EIQ Number: 92-6954

Facility File Number: 30-08-002

Responsible Official

Name: Mr. Jeremy DuMond

Title: VP of EHSS

Mailing Address: 1811 Aksarben Drive, Omaha, NE 68106

Phone #: (402) 952-4850

Permit Contact Person for the Facility

Name: Mr. Tod Smith

Title: Plant Manager

Mailing Address: 1495 320th Avenue, Superior, IA 51363

Phone #: (712) 858-4666

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



11/16/2023

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
DDGS.....	distiller's dried grains with solubles
DNR	Iowa Department of Natural Resources
EIQ.....	emissions inventory questionnaire
EP	emission point
EU	emission unit
°F	degrees Fahrenheit
gr./dscf	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	new source performance standard
ppmv	parts per million by volume
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 10 microns or less in diameter
PM _{2.5}	particulate matter 2.5 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: Green Plains Superior, LLC

Permit Number: 13-TV-005R2

Facility Description: Industrial Organic Chemicals/Ethanol Production (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit
EP-SV01	EU-01	Truck Dump Pit	06-A-459-S3
	EU-02	Rail Dump Pit	
	EU-03	Corn Conveyor #1	
	EU-04	Corn Elevator #1	
	EU-05	Corn Conveyor #2	
	EU-06	Corn Elevator #2	
	EU-11	Corn Conveyor #3	
	EU-48	Corn Conveyor #5	
EP-SV02	EU-08	Corn Bin #1	06-A-460-S1
EP-SV05	EU-07	Scalper	06-A-463-S2
	EU-10	Surge Bin	
	EU-12	Hammermill #1	
	EU-13	Hammermill #2	
EP-SV07	EU-17	Fermenter #1	06-A-465-S6
	EU-18	Fermenter #2	
	EU-19	Fermenter #3	
	EU-20	Beerwell	
	EU-43	Fermenter #4	
	EU-51	Beer Degas System	
	EU-80	Yeast Propagator Tank	
EP-SV08	EU-14	Slurry Tank	06-A-466-S9
	EU-15	Liquefaction Tank	
	EU-21	Beer Stripper	
	EU-22	Side Stripper	
	EU-23	Rectifier Column	
	EU-24	Molecular Sieves 1 & 2	
	EU-25	Evaporator	
	EU-26	Whole Stillage Tank	
	EU-27	Centrate Stillage Tank	
	EU-28	Centrifuge #1	
	EU-29	Centrifuge #2	
	EU-30	Centrifuge #3	
	EU-31	Centrifuge #4	
	EU-32	Syrup Tank	
	EU-38	200 Proof Condenser	
	EU-52	Evaporator #2	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit
	EU-53	Evaporator #3	
	EU-54	Evaporator #4	
	EU-80	Yeast Propagator Tank	
EP-SV09	EU-33	DDGS Dryer	06-A-467-S5
	EU-34	DDGS Cooler	
EP-SV10	EU-35	DDGS Handling	06-A-468-S2
	EU-36	DDGS Rail Loadout	
	EU-37	DDGS Truck Loadout	
EP-SV11	EU-B01	Boiler #1	06-A-469-S3
EP-SV12	EU-B02	Boiler #2	06-A-470-S3
EP-SV14	EU-39	Ethanol Truck Loadout	11-A-707-S1
	EU-40	Ethanol Rail Loadout	
EP-SV15	EU-B04	Fire Pump	11-A-708
EP-SV16	EU-42	Lime Silo	11-A-709
EP-SV18	EU-34	DDGS Cooler By-pass	11-A-710-S1
EP-SV20	EU-44	Truck Dump Pit #2	16-A-332-S1
	EU-45	Truck Conveyor #2	
	EU-46	Corn Elevator #3	
	EU-47	Corn Conveyor #4	
	EU-49	Corn Bin #2	
	EU-50	Corn Conveyor #6	
EP-FS01	EU-FS01	Uncaptured DDGS Storage Building Emission	NA
EP-FS03	EU-FS03	Uncaptured Grain Receiving Emissions	NA
EP-FS04	EU-FS04	Uncaptured DDGS Handling Emissions	NA
EP-FS05	EU-FS05	VOC Emissions from Equipment Leaks	06-A-473-S1
EP-FS06	EU-FS06	Truck Traffic	06-A-474-S3
EP-FS07	EU-FS07	Cooling Tower	20-A-087-S1
EP-TK001	EU-TK001	200 Proof Ethanol Storage Tank	06-A-475-S2
EP-TK002	EU-TK002	200 Proof Ethanol Storage Tank	06-A-476-S2
EP-TK003	EU-TK003	Denaturant Storage Tank	06-A-477-S2
EP-TK004	EU-TK004	Denatured Ethanol Storage Tank	06-A-478-S3
EP-TK005	EU-TK005	Denatured Ethanol Storage Tank	06-A-479-S3

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
NA	Parts Washer1
TK-7704	Ammonia Tank (19,744 gal)
TK-7702	Sulfuric Acid Tank (6,893 gal)
TK-D1	Diesel Tank (550 gal)
TK-FP1	Diesel Tank (650 gal)
TK-7901	Corn Oil Storage Tank (63,174 gal)
NA	Corn Oil Loadout
NA	Natural Gas Space Heating (7 Units)
NA	Temp Storage Piles 1, 2, and 3

II. Plant-Wide Conditions

Facility Name: Green Plains Superior, LLC

Permit Number: 13-TV-005R2

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

Permit Duration

The term of this permit is: Five Years from permit issuance

Commencing on: 11/16/2023

Ending on: 11/15/2028

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"

40 CFR 60 Subpart A Requirements

This facility is an affected source and these General Provisions apply to the facility. The affected units are EP-SV11, EP-SV12, EP-SV15, EP-TK001, EP-TK002, EP-TK003, EP-TK004, and EP-TK005.

See Appendix A for the link to the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart Dc Requirements

This facility is subject to Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. The affected units are EP-SV11 and EP-SV12.

See Appendix A for the link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Dc
567 IAC 23.1(2)"III"

40 CFR 60 Subpart Kb Requirements

This facility is subject to Standards of Performance for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. The affected units are EP-TK001, EP-TK002, EP-TK003, EP-TK004 and EP-TK005.

See Appendix A for the link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

40 CFR 60 Subpart VV Requirements

This facility is subject to Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006. See EU FS05: VOC Emissions from Equipment Leaks.

See Appendix A for the link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

40 CFR 60 Subpart IIII Requirements

This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion [40 CFR Part 60 Subpart IIII]. The affected unit is EP-SV15.

See Appendix A for the link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP) [40 CFR Part 63 Subpart ZZZZ]. The affected unit is EP-SV15.

See Appendix A for the link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

III. Emission Point-Specific Conditions

Facility Name: Green Plains LLC – Superior

Permit Number: 13-TV-005R2

Emission Point ID Number: EP-SV01

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-01	Truck Dump Pit #1	CE-C01: Baghouse	Grain	20,000 bu/hr	06-A-459-S3
EU-02	Rail Dump Pit		Grain	20,000 bu/hr	
EU-03	Corn Conveyor #1		Grain	20,000 bu/hr	
EU-04	Corn Elevator #1		Grain	20,000 bu/hr	
EU-05	Corn Conveyor #2		Grain	20,000 bu/hr	
EU-06	Corn Elevator #2		Grain	10,000 bu/hr	
EU-11	Corn Conveyor #3		Grain	10,000 bu/hr	
EU-48	Corn Conveyor #5		Grain	20,000 bu/hr	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-459-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.60 lb/hr; 7.37 ton/yr ⁽²⁾; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-459-S3
567 IAC 23.4(7)

⁽²⁾This limit applies to grain receiving and includes emissions from EP SV01 and uncaptured emissions from grain receiving, assuming 20% of emissions are not captured. The uncaptured emissions compliance demonstration methodology is specified as an operating limit listed below.

Operational Limits & Reporting/Record keeping Requirements

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

- A. The facility shall not receive more than 24,190,416 bushels of grain in any rolling 12-month period. The owner or operator shall:
 - i. On a monthly basis, record the total amount grain received at the facility, in bushels; and
 - ii. On a monthly basis, calculate and record the rolling 12-month total, in bushels.
- B. The owner or operator shall maintain the Baghouse (CE C01) according to the manufacturer's specifications and maintenance schedule. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C01). This log shall include, but is not necessarily limited to:
 - i. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C01);
 - ii. Any issues identified during the inspection and the date each issue was resolved;
 - iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - iv. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-459-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 65

Stack Opening, (inches, dia.): 17.7

Exhaust Flow Rate (scfm): 9,600

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-459-S3

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

Monitoring Requirements

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

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

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

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

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV02

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-08	Corn Bin #1	CE-C02: Spot Filter	Corn	262,700 Bushels	06-A-460-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-460-S1
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): 0.03 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-460-S1
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 0.03 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-460-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.

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

- A. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:
- Date and time the activity took place;
 - Description of any issues identified during an inspection or addressed by maintenance activities;

iii. Identification of staff members participating.
Authority for Requirement: DNR Construction Permit 06-A-460-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 92
Stack Opening: There are 10 vents with total area of 125 square feet
Exhaust Flow Rate (scfm): Various*
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Obstructed
Authority for Requirement: DNR Construction Permit 06-A-460-S1

*The air flow from this unit is the air displaced by the introduction of grain into the bin.

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 ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV05

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-07	Scalper	CE-C05: Baghouse	Grain	10,000 Bushel/hr	06-A-463-S2
EU-10	Surge Bin		Grain	10,000 Bushels	
EU-12	Hammermill #1		Grain	1,400 Bushel/hr	
EU-13	Hammermill #2		Grain	1,400 Bushel/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-463-S2
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): 0.34 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06A-463-S2
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 0.34 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-463-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.

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

- A. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:
 - i. Date and time the activity took place;

- ii. Description of any issues identified during an inspection or addressed by maintenance activities;
- iii. Identification of staff members participating.

Authority for Requirement: DNR Construction Permit 06-A-463-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 60

Stack Opening, (inches, dia.): 18

Exhaust Flow Rate (scfm): 9,640

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-463-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 ☒

Facility operation and maintenance plans must be sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the applicable requirements.

The data pertaining to the plan must be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV07

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-17	Fermenter #1	CE-C07: CO2 Packed Bed Scrubber	Ethanol	580,200 gallons	06-A-465-S6
EU-18	Fermenter #2			580,200 gallons	
EU-19	Fermenter #3			580,200 gallons	
EU-20	Beerwell			729,400 gallons	
EU-43	Fermenter #4			580,200 gallons	
EU-51	Beer Degas System			5,000 gallons	
EU-80*	Yeast Propagator Tank			15,000 gallons	

*EU ID has been changed from EU44. This administrative change should be corrected in the next construction permit modification.

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-465-S6
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.40 lb/hr ⁽²⁾; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-465-S6
567 IAC 23.4(7)

Pollutant: PM_{2.5}

Emission Limit(s): 0.40 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-465-S6

Pollutant: PM₁₀

Emission Limit(s): 0.40 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-465-S6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-465-S6

Pollutant: Single HAP
Emission Limit(s): 1.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-465-S6

Pollutant: Total HAP
Emission Limit(s): 1.50 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-465-S6

Operational Limits & Reporting/Record keeping Requirements

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

- A. The owner or operator shall operate CO₂ Packed Bed Scrubber, CE-C07, at all times any of the equipment described in the associated equipment table above is in operation.
- B. The owner or operator shall maintain a 3-hour block average differential pressure drop across CO₂ Packed Bed Scrubber (CE-C07) between 1.0 and 12.0 of water column (as specified by the manufacturer). This requirement shall not apply when the fermentation process is not in operation.
 - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the pressure drop (in inches of water column) across the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop (in inches of water column) across the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average differential pressure drop for the scrubber. The 3-hour block average differential pressure drop for the scrubber controlling emissions shall be calculated using all data points collected during the averaging period.
 - iii. If any of the differential pressure drop (in inches of water column) 3-hour block averages across the scrubber falls outside the required range, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average differential pressure drop is back within the required range.
- C. The owner or operator shall maintain a 3-hour block average total water flow rate (in gallons per minute) to the scrubber (CE-C07) at or above the average rate observed during the most recent stack test that demonstrated compliance with all applicable emission limitations. This requirement shall not apply when the fermentation process is not in operation.
 - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the total water flow rate (in gallons per minute) to the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.

- ii. The owner or operator shall collect and record the total water flow rate (in gallons per minute) to the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average total water flow rate to the scrubber. The 3-hour block average total water flow rate to the scrubber shall be calculated using all data points collected during the averaging period.
 - iii. If any of the total water flow rate (in gallons per minute) 3-hour block averages to the scrubber falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average total water flow rate is back at or above the minimum required value.
 - iv. Use of a lower total water flow rate requires the owner or operator to first obtain a variance to test the lower total water flow rate. The owner or operator shall submit the test results to the Department for review and approval. Once approved, the owner or operator shall be allowed to use the lower total water flow rate.
- D. The owner or operator shall maintain a 3-hour block average additive feed rate (in milliliters per minute) to the scrubber (CE-C07) at or above the average rate observed during the most recent stack test that demonstrated compliance with all applicable emission limitations. This requirement shall not apply when the fermentation process is not in operation.
- i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the additive feed rate (in milliliters per minute) to the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.
 - ii. The owner or operator shall collect and record the additive feed rate (in milliliters per minute) to the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average additive feed rate to the scrubber. The 3-hour block average additive feed rate to the scrubber shall be calculated using all data points collected during the averaging period.
 - iii. If any of the additive feed rate (in milliliters per minute) 3-hour block averages to the scrubber falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average additive feed rate is back at or above the minimum required value.
 - iv. Use of a different additive and/or use of a lower additive feed rate requires the owner or operator to first obtain a variance to test the new additive and/or the lower additive feed rate. The owner or operator shall submit the test results to the Department for review and approval. Once approved, the owner or operator shall be allowed to use the new additive and/or the lower additive feed rate.
- E. The owner or operator shall maintain on-site a copy of the most recent stack test that demonstrated compliance with all applicable emission limitations. At a minimum, this report shall include:
- i. The emission rates (in pounds per hour) observed during the testing;
 - ii. The average differential pressure drop (in inches of water column) across the scrubber observed during the testing;
 - iii. The average water feed rate (in gallons per minute) into the scrubber during the testing;
 - iv. The type of additive used during the testing;
 - v. The average additive feed rate (in milliliters per minute) into the scrubber during

- the testing; and
 - vi. The average beer feed rate (in gallons per minute) observed during the testing.
- F. The owner or operator shall inspect and maintain the control equipment according to the manufacturer's specifications and/or the facility's (Plant No. 30-08-002) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:
 - a. The date that any inspection and/or maintenance was performed on the control equipment;
 - b. Any issues identified during inspection and the date each issue was resolved;
 - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-465-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 68

Stack Opening, (inches, dia.): 23.5

Exhaust Flow Rate (scfm): 6,870

Exhaust Temperature (°F): 68

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-465-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	Frequency	Test Run Time	Test Method
VOC ⁽¹⁾	Once every 3 Years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP ^{(2) (3)}	Once every 3 Years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ VOC periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a

worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If any test exceeds 90% of the VOC emission limit, testing shall revert back to annual until 2 consecutive tests demonstrate VOC emissions that are less than 90% of the emission limit. The most recent VOC stack test on EP-SV07 was conducted on June 15, 2022; therefore, the next VOC testing shall be conducted in June, July, or August of Year 2025.

⁽²⁾ HAP periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If test exceeds 90% of the HAP emission limits, testing shall revert back to annual until 2 consecutive tests demonstrate HAP emissions that are less than 90% of the emission limit. The most recent HAP stack test on EP-SV07 was conducted on June 15, 2022; therefore, the next HAP testing shall be conducted by no later than June, July, or August of Year 2025.

⁽³⁾ 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.

Authority for Requirement: DNR Construction Permit 06-A-465-S6

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 ☐

Compliance with the Operating Requirements with Associated Monitoring and Recordkeeping fulfills the CAM requirements. A separate CAM plan for the CO₂ Packed Bed Wet Scrubber (CE-C07) is not required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV08

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-14	Slurry Tank	CE-C08: Vent Gas Packed Bed Scrubber	Mash	14,160 gallons	06-A-466-S9
EU-15	Liquefaction Tank		Mash	176,060 gallons	
EU-21	Beer Stripper		Undistilled Beer	706 gpm	
EU-22	Side Stripper		Undistilled Beer	165 gpm	
EU-23	Rectifier Column		Ethanol	240 gpm	
EU-24	Molecular Sieves 1 & 2		Ethanol	94 gpm	
EU-25	Evaporator		Stillage	2,619 gpm	
EU-26	Whole Stillage Tank		Stillage	237,237 gallons	
EU-27	Centrate Stillage Tank		Stillage	137,736 gallons	
EU-28	Centrifuge #1		Stillage	135 gpm	
EU-29	Centrifuge #2		Stillage	135 gpm	
EU-30	Centrifuge #3		Stillage	135 gpm	
EU-31	Centrifuge #4		Stillage	135 gpm	
EU-32	Syrup Tank		Syrup	120,855 gallons	
EU-38	200 Proof Condenser		Ethanol	116 gpm	
EU-52	Evaporator #2		Ethanol	2,619 gpm	
EU-53	Evaporator #3		Ethanol	2,619 gpm	
EU-54	Evaporator #4		Ethanol	2,619 gpm	
EU-80*	Yeast Propagator Tank		Yeast/Ethanol	15,000 gallons	

*EU ID has been changed from EU44. This administrative change should be corrected in the next construction permit modification.

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-466-S9
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): 0.04 lb/hr ; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 06-A-466-S9
567 IAC 23.4(7)

Pollutant: PM_{2.5}
Emission Limit(s): 0.04 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-466-S9

Pollutant: PM₁₀
Emission Limit(s): 0.04 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-466-S9

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 5.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-466-S9

Pollutant: Single HAP
Emission Limit(s): 0.55 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-466-S9

Pollutant: Total HAP
Emission Limit(s): 1.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-466-S9

Operational Limits & Reporting/Record keeping Requirements

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

- A. The owner or operator shall operate Vent Gas Packed Bed Scrubber, CE-C08, at all times any of the equipment described in the Associated Equipment Table listed above is in operation.
- B. The owner or operator shall maintain a 3-hour block average differential pressure drop across Vent Gas Packed Bed Scrubber (CE-C08) between 0.1 and 5.0 of water column (as specified by the manufacturer). This requirement shall not apply when the distillation process is not in operation.
 - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the pressure drop (in inches of water column) across the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.
 - ii. The owner or operator shall collect and record the pressure drop (in inches of water column) across the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average differential pressure drop for the scrubber. The 3-hour block average differential pressure drop for the scrubber

controlling emissions shall be calculated using all data points collected during the averaging period.

- iii. If any of the differential pressure drop (in inches of water column) 3-hour block averages across the scrubber falls outside the required range, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average differential pressure drop is back within the required range.
- C. The owner or operator shall maintain a 3-hour block average total water flow rate (in gallons per minute) to the scrubber (CE-C08) at or above the average rate observed during the most recent stack test that demonstrated compliance with all applicable emission limitations. This requirement shall not apply when the fermentation process is not in operation.
- i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the total water flow rate (in gallons per minute) to the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.
 - ii. The owner or operator shall collect and record the total water flow rate (in gallons per minute) to the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average total water flow rate to the scrubber. The 3-hour block average total water flow rate to the scrubber shall be calculated using all data points collected during the averaging period.
 - iii. If any of the total water flow rate (in gallons per minute) 3-hour block averages to the scrubber falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average total water flow rate is back at or above the minimum required value.
 - iv. Use of a lower total water flow rate requires the owner or operator to first obtain a variance to test the lower total water flow rate. The owner or operator shall submit the test results to the Department for review and approval. Once approved, the owner or operator shall be allowed to use the lower total water flow rate.
- D. The owner or operator shall maintain a 3-hour block average additive feed rate (in milliliters per minute) to the scrubber (CE-C08) at or above the average rate observed during the most recent stack test that demonstrated compliance with all applicable emission limitations. This requirement shall not apply when the fermentation process is not in operation.
- i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the additive feed rate (in milliliters per minute) to the scrubber. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications and/or the facility's operation and maintenance plan.
 - ii. The owner or operator shall collect and record the additive feed rate (in milliliters per minute) to the scrubber at a minimum of once every 15 minutes and calculate and record the 3-hour block average additive feed rate to the scrubber. The 3-hour block average additive feed rate to the scrubber shall be calculated using all

- data points collected during the averaging period.
- iii. If any of the additive feed rate (in milliliters per minute) 3-hour block averages to the scrubber falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average additive feed rate is back at or above the minimum required value.
 - iv. Use of a different additive and/or use of a lower additive feed rate requires the owner or operator to first obtain a variance to test the new additive and/or the lower additive feed rate. The owner or operator shall submit the test results to the Department for review and approval. Once approved, the owner or operator shall be allowed to use the new additive and/or the lower additive feed rate.
- E. The owner or operator shall maintain on-site a copy of the most recent stack test that demonstrated compliance with all applicable emission limitations. At a minimum, this report shall include:
- i. The emission rates (in pounds per hour) observed during the testing;
 - ii. The average differential pressure drop (in inches of water column) across the scrubber observed during the testing;
 - iii. The average water feed rate (in gallons per minute) into the scrubber during the testing;
 - iv. The type of additive used during the testing;
 - v. The average additive feed rate (in milliliters per minute) into the scrubber during the testing; and
 - vi. The average beer feed rate (in gallons per minute) observed during the testing.
- F. The owner or operator shall inspect and maintain the control equipment according to the manufacturer's specifications and/or the facility's (Plant No. 30-08-002) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:
 - a. The date that any inspection and/or maintenance was performed on the control equipment;
 - b. Any issues identified during inspection and the date each issue was resolved;
 - c. Any issues addressed during the maintenance activities and the date each issue was resolved; and
 - d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-466-S9

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 65

Stack Opening, (inches, dia.): 15

Exhaust Flow Rate (scfm): 400

Exhaust Temperature (°F): 68

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-466-S9

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	Frequency	Test Run Time	Test Method
VOC ⁽¹⁾	Once every 3 years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP ^{(2) (3)}	Once every 3 years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ VOC periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If any test exceeds 90% of the VOC emission limit, testing shall revert back to annual until 2 consecutive tests demonstrate VOC emissions that are less than 90% of the emission limit. The most recent VOC stack test on EP-SV08 was conducted on June 14, 2022.

⁽²⁾ HAP periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If test exceeds 90% of the HAP emission limits, testing shall revert back to annual until 2 consecutive tests demonstrate HAP emissions that are less than 90% of the emission limit. The most recent HAP stack test on EP-SV08 was conducted on June 14, 2022.

⁽³⁾ 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.

Authority for Requirement: DNR Construction Permit 06-A-466-S9

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 ☐

Compliance with the Operating Requirements with Associated Monitoring and Recordkeeping fulfills the CAM requirements. A separate CAM plan for the Vent Gas Packed Bed Wet Scrubber (CE-C08) is not required.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV09

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment		Raw Material	Rated Capacity	Construction Permit
EU-33	DDGS Dryer	CE-C09: Multiclones	Regenerative Thermal Oxidizer (CE-C10, 12 MMBtu/hr)	Natural Gas	95 MMBtu/hr	06-A-467-S5
EU-34	DDGS Cooler	CE-C13: Baghouse		DDGS	23 ton/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-467-S5
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): 7.5 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-467-S5
567 IAC 23.4(7)

Pollutant: PM_{2.5}

Emission Limit(s): 7.5 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: PM₁₀

Emission Limit(s): 7.5 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 7.06 lb/hr; 500ppm_v

Authority for Requirement: DNR Construction Permit 06-A-467-S5
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 15.00 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 20.00 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: Single HAP
Emission Limit(s): 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-467-S5

Pollutant: Total HAP
Emission Limit(s): 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-467-S5

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. These records shall demonstrate compliance with all applicable operating limits. Records shall be legible and maintained in an orderly manner.

Equipment Operation Requirements

- A. The DDGS Dryer (EU-33) and RTO C10 shall combust only natural gas and/or process off-gases.
- B. RTO C10 shall be operated at all times that the DDGS Dryer (EU-33) is in operation.
- C. The exhaust stream from the DDGS Cooler (EU-34) may vent through Emission Point SV18 when RTO C10 is unexpectedly offline.
- D. RTO C10 operating temperature, measured as a 3-hour average, shall be maintained at no less than 50 degrees Fahrenheit below the average temperature recorded during the most recent stack test that demonstrated compliance with all applicable emission limitations.
 - i. The owner or operator shall retain the most recent stack test for RTO C10 that demonstrated compliance with all applicable emission limitations.
 - ii. The owner or operator shall document the average temperature of RTO C10 recorded during the most recent stack test that demonstrated compliance with all applicable emission limitations.
 - iii. The owner or operator shall determine the minimum operating temperature of RTO C10 as follows:
 - a. Minimum Operating Temperature = Average temperature recorded during the most recent stack test that demonstrated compliance with all applicable emission limitations – 50°F
 - iv. The owner or operator shall collect and record the operating temperature, in degrees Fahrenheit, of RTO C10 at a minimum of once every 15 minutes.
 - v. The owner or operator shall calculate and record the operating temperature 3-hour averages, in degrees Fahrenheit, of RTO C10.
 - a. If any operating temperature 3-hour average does not comply with the minimum operating temperature, the owner or operator shall investigate and

make any necessary corrections.

- E. The owner or operator shall maintain records of the frequency and amount of time that RTO C10 malfunctions and shall estimate and record the emissions emitted during said malfunctions. All excess emission reporting shall be conducted in accordance with General Condition G30 of this Title V permit.

Control Equipment Requirements

- F. The owner or operator shall inspect and maintain the Multiclones (CE-C09), the RTO (CE-C10), and the Baghouse (CE-C13) according to the manufacturer's specifications and/or the facility's (Plant No. 30-08-002) operation and maintenance plan.
 - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include:
 - a. The date that any inspection and/or maintenance was performed on the control equipment;
 - b. Any issues identified during inspection and the date each issue was resolved;
 - c. Any issues addressed during the maintenance activities and the date each issue was resolved;
 - d. Any actions taken to correct the RTO operating temperature malfunctions; and
 - e. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 06-A-467-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 91

Stack Opening, (inches, dia.): 66

Exhaust Flow Rate (scfm): 63,600

Exhaust Temperature (°F): 375

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-467-S5

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

Monitoring Requirements

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

Stack Testing:

Pollutant	Frequency	Test Run Time	Test Method
VOC ⁽¹⁾	Once every 3 years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP ^{(2) (3)}	Once every 3 years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

⁽¹⁾ VOC periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If any test exceeds 90% of the VOC emission limit, testing shall revert back to annual until 2 consecutive tests demonstrate VOC emissions that are less than 90% of the emission limit. The most recent VOC stack test on EP-SV09 was conducted on June 14, 2022; therefore, the next VOC testing shall be conducted in June, July, or August of Year 2025.

⁽²⁾ HAP periodic testing to demonstrate compliance with the emission limits listed above shall be completed once every three years in June, July, or August and it shall be conducted while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If test exceeds 90% of the HAP emission limits, testing shall revert back to annual until 2 consecutive tests demonstrate HAP emissions that are less than 90% of the emission limit. The most recent HAP stack test on EP-SV09 was conducted on June 14, 2022; therefore, the next HAP testing shall be conducted by no later than June, July, or August of Year 2025.

⁽³⁾ 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.

Authority for Requirement: DNR Construction Permit 06-A-467-S5

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 ☐

CAM Plan is required for the baghouse (CE-13).

Compliance with the Operating Requirements with Associated Monitoring and Recordkeeping fulfills the CAM requirements for CE-C10. A separate CAM plan for the Regenerative Thermal Oxidizer (CE-C10) is not required.

Authority for Requirement: 567 IAC 22.108(3)

**Compliance Assurance Monitoring Plan for Green Plains Superior, LLC
Facility located in Superior, Iowa**

EP SV09/SV18 –DDGS Cooler Baghouse

I. Background

A. Emissions Unit

Description: DDGS Cooler (EU34)

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.:	Construction Permit # 06-A-467-S5 Construction Permit # 11-A-710-S1 (Bypass)
Emission Limit or Standard:	0.1 gr/dscf PM (for SV09 and SV18) 7.5 lbs/hr PM/PM ₁₀ (For SV09 only)

C. Control Technology

Fabric Filter Baghouse (CE-C13)

II. DDGS Cooler Baghouse (CE-C13) Monitoring Approach

A. Indicator

Pressure drop will be used as the performance indicator.

B. Measurement Approach

The key elements of the monitoring approach, including the indicators to be monitored, indicator ranges, and performance criteria are presented in Table 1.

Table 1. Monitoring Approach

I. Indicator	Pressure Drop
Measurement Approach	The pressure drop will be monitored and recorded at least once each day of operation.
II. Indicator Range	A pressure drop between 0.5 and 6.0 inches of water shall be maintained during operation.
Corrective Action	Each excursion triggers an inspection, corrective action, and a reporting requirement.
QIP Threshold	An accumulation of excursions outside the indicator range of six or more for a reporting period excluding periods of startup, shutdown and malfunction.

III. Performance Criteria	
A. Data Representativeness	Pressure drop is measured across the system.
B. Verification of Operational Status	Not applicable.
C. QA/QC Practices and Criteria	Calibrate, maintain, and operate instrumentation in accordance with manufacturer's recommendation.
D. Monitoring Frequency	The pressure drop will be recorded a minimum of once per day during operations.
Data Collection Procedures	The pressure drop will be recorded electronically or manually.
Averaging period	Not applicable.
E. Record Keeping	Maintain for a period of 5 years records of electronic media and corrective actions taken in response to excursions.
F. Reporting	Number, duration, and cause of any excursion and the corrective action taken.
Frequency	Semiannually.

Emission Point ID Number: EP-SV10

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-35	DDGS Handling	CE-C11: Baghouse	DDGS	45,000 Bushel/hr	06-A-468-S2
EU-36	DDGS Rail Loadout		DDGS	45,000 Bushel/hr	
EU-37	DDGS Truck Loadout		DDGS	45,000 Bushel/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-468-S2
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): 0.26 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-468-S2
567 IAC 23.4(7)

Pollutant: PM₁₀

Emission Limit(s): 0.26 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-468-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.

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

- A. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:
- Date and time the activity took place;

- ii. Description of any issues identified during an inspection or addressed by maintenance activities;
- iii. Identification of staff members participating.

Authority for Requirement: DNR Construction Permit 06-A-468-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 72

Stack Opening, (inches): 12×12

Exhaust Flow Rate (scfm): 630

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 06-A-468-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-SV11 & EP-SV12

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-B01	Boiler #1	CE-B01: Low NOx Burners	Natural Gas or Propane	92.1 MMBtu/hr	06-A-469-S3
EU-B02	Boiler #2	CE-B02: Low NOx Burners	Natural Gas or Propane	92.1 MMBtu/hr	06-A-470-S3

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-469-S3, 06-A-469-S3
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.69 lb/hr; 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3
567 IAC 23.3(2)"b"(2)

Pollutant: PM₁₀

Emission Limit(s): 0.69 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.055 lb/hr, 500 ppmv

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 7.00 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.50 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 6.00 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Pollutant: Single HAP

Emission Limit(s): 0.16 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Pollutant: Total HAP

Emission Limit(s): 0.17 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-469-S3, 06-A-469-S3

Operational Limits & Requirements

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

Operating Limits

- A. These units shall combust natural gas or liquefied petroleum gas (propane) only.

Reporting and Recordkeeping

- A. The owner or operator shall record the amount of each fuel combusted in each unit during each operating day as required by 40 CFR §60.48c(g)(1). As an alternative, the owner or operator may record the amount of each fuel combusted in each unit during each calendar month as allowed in 40 CFR §60.48c(g)(2) or may record the amount of fuel delivered to the facility on a calendar month basis as allowed under 40 CFR §60.48c(g)(3) as long as all other requirements of 40 CFR §60.48c(g)(3) are met.

Authority for Requirement: DNR Construction Permit 06-A-469-S3, 06-A-469-S3

NSPS & NESHAP Applicability

This unit is subject to the requirements of the New Source Performance Standards (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units (40 CFR 60 Subpart Dc; 567 IAC 23.1(2)“III”).

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 46

Stack Opening, (inches, dia.): 35.5

Exhaust Flow Rate (scfm): 21,200 (EP-SV11), 20,600 (EP-SV12)

Exhaust Temperature (°F): 310

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-469-S3

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV14

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-39	Ethanol Truck Loadout	CE-C14: Flare (Natural Gas Fired, 0.954 MMBtu/hr)	Ethanol	903 gal/min	11-A-707-S1
EU-40	Ethanol Rail Loadout		Ethanol	1000 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 11-A-707-S1
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): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-707-S1
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

Authority for Requirement: 567 IAC 23.3(3)"e"

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 flare associated with this operation shall be operated at all times when product is being loaded into trucks or railcars.
- B. The amount of denatured ethanol that is loaded out shall not exceed 68,500,000 gallons per twelve (12) month period, rolled monthly.
- C. The flare (C14) shall:
 - i. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - ii. Be operated with a flame present at all times.
 - iii. Be designed to ensure smokeless operation.

D. The owner or operator shall inspect and maintain the control equipment according to the manufacturer's specifications and/or the facility's (Plant No. 30-08-002) operation and maintenance plan.

a. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. At a minimum, this log shall include the following:

- i. The date that any inspection and/or maintenance was performed on the control equipment;
- ii. Any issues identified during inspection and the date each issue was resolved;
- iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and
- iv. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 11-A-707-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35

Stack Opening, (inches, dia.): 8 (burner tip)

Exhaust Flow Rate (scfm): 270

Exhaust Temperature (°F): 700

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-707-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-SV15

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU-B04	Fire Pump	Diesel	575 bhp	11-A-708

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 11-A-708
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): 1.23 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-708
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.23 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-708

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)"b"

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 17.5 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-708

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.39 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-708

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.77 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-708

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.

Operating Limits

- A. This engine is limited to burning diesel fuel oil only.
- B. This engine is limited to operating a maximum of 100 hours in any rolling 12-month period.
- C. This engine is limited to operating for emergency situations and required testing and maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.
- D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR §80.510(b) for non-road diesel fuel:
 - 1. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
 - 2. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.
- E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
- F. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the manufacturer. The owner or operator may only change engine settings that are permitted by the manufacturer.

Reporting and Recordkeeping

- A. The owner or operator shall maintain the following monthly records:
 - i. the total number of hours that the engine operated;
 - ii. the number of hours that the engine operated for maintenance checks and readiness testing; and
 - iii. the rolling 12-month total amount of the number of hours that the engine operated.
- B. The owner or operator shall maintain an annual record of the number of hours that the engine operated for maintenance checks and readiness testing.
- C. The owner or operator of the engine shall comply with the requirements of condition D listed above in the Operating Limit section by one of the following methods:
 - i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR §80.510(b);
 - ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
 - iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement: DNR Construction Permit 11-A-708

NSPS and NESHAP Applicability

This emission point is subject to New Source Performance Standard (NSPS) for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60 Subpart IIII].

Authority for Requirement: 40 CFR Part 60 Subpart IIII
DNR Construction Permit 11-A-708
567 IAC 23.1(2)"yyy"

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. No further requirements apply for this engine under Part 63.

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 8.5
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 2,900
Exhaust Temperature (°F): 918
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 11-A-708

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-SV16**Associated Equipment**

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-42	Lime Silo	CE-C16: Baghouse	Lime	28 ton	11-A-709

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 11-A-709
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): 0.77 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-709
567 IAC 23.3(2)"a"

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.77 lb/hr

Authority for Requirement: DNR Construction Permit 11-A-709

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.

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

A. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:

- i. Date and time the activity took place;
- ii. Description of any issues identified during an inspection or addressed by maintenance activities;
- iii. Identification of staff members participating.

Authority for Requirement: DNR Construction Permit 11-A-709

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 45

Stack Opening, (inches, dia.): 32

Exhaust Flow Rate (scfm): 900

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Obstructed

Authority for Requirement: DNR Construction Permit 11-A-709

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-SV18 (Bypass Stack for EP-SV09)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-34	DDGS Cooler By-Pass	CE-C13: Baghouse	DDGS	23 ton/hr	11-A-710-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 11-A-710-S1
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): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-710-S1
567 IAC 23.3(2)"a"

Operational Limits & 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.

Operating Limits

- A. Emissions shall only be vented through this emission point when the regenerative thermal oxidizer associated with the DDGS dryer unexpectedly is off line.
- B. Emissions from this unit shall be vented through the DDGS cooler baghouse at all times the cooler is operating.
- C. The owner or operator shall inspect and maintain the control equipment according to manufacturer's specifications.

Reporting and Recordkeeping

- A. The owner or operator shall maintain a log of the operation of this emission point. This log shall include, but not necessarily limited to:
 - i. The date and time by-pass operation of the by-pass began;
 - ii. The duration of the by-pass operation;
 - iii. Description of the reason for by-passing.

B. The owner or operator shall keep a log of all inspection and maintenance activities that are undertaken on the control equipment associated with this emission point. This log shall include, but not necessarily be limited to:

- i. Date and time the activity took place;
- ii. Description of any issues identified during an inspection or addressed by maintenance activities;
- iii. Identification of staff members participating.

Authority for Requirement: DNR Construction Permit 11-A-710-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 31

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 12,400

Exhaust Temperature (°F): 100

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 11-A-710-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 ☐

See the CAM plan for baghouse (CE-C13) on page 33.

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-SV20 (Grain Receiving 2)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-44	Truck Dump Pit #2	CE-C20: Baghouse	Corn	15,000 bu/hr	16-A-332-S1
EU-45	Truck Conveyor #2		Corn	15,000 bu/hr	
EU-46	Corn Elevator #3		Corn	15,000 bu/hr	
EU-47	Corn Conveyor #4		Corn	15,000 bu/hr	
EU-49	Corn Bin #2		Corn	330,000 bushels	
EU-50	Corn Conveyor #6		Corn	10,000 bu/hr	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

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

DNR Construction Permit 16-A-332-S1

⁽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): 0.77 lb/hr ⁽²⁾, 8.11 tons/yr ⁽³⁾, 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 16-A-332-S1

⁽²⁾ This limit applies to EP SV20 only.

⁽³⁾ This limit applies to grain receiving and includes emissions from EP SV01 and uncaptured emissions from grain receiving, assuming 20% of emissions are not captured.

Operational Limits & Reporting/Record keeping Requirements

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

- A. The facility shall not receive more than 24,190,416 bushels of grain in any rolling 12-month period. The owner or operator shall:
 - i. On a monthly basis, record the total amount grain received at the facility, in bushels; and
 - ii. On a monthly basis, calculate and record the rolling 12-month total, in bushels.
- B. The owner or operator shall maintain the Baghouse (CE C20) according to the manufacturer's specifications and maintenance schedule. The owner or operator shall

maintain a log of all maintenance and inspection activities performed on the Baghouse (CE C20). This log shall include, but is not necessarily limited to:

- i. The date and time any inspection and/or maintenance was performed on the Baghouse (CE C20);
- ii. Any issues identified during the inspection and the date each issue was resolved;
- iii. Any issues addressed during the maintenance activities and the date each issue was resolved; and
- iv. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 16-A-332-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.): 24

Exhaust Flow Rate (scfm): 9,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 16-A-332-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-FS01, EP-FS03, and EP-FS04

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EP-FS01	EU-FS01	Uncaptured DDGS Storage Building Emissions	Dry Product	NA	NA
EP-FS03	EU-FS03	Uncaptured Grain Receiving Emissions	Grain	NA	NA
EP-FS04	EU-FS04	Uncaptured DDGS Handling Emissions	Dry Product	NA	NA

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%

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr./dscf

Authority for Requirement: 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.

There are no operational limits or record keeping requirements at this time.

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-FS05

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU-FS05	VOC Emissions from Equipment Leaks	VOC Fugitive	NA	06-A-473-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%

Authority for Requirement: DNR Construction Permit 06-A-473-S1
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-473-S1
567 IAC 23.3(2)"a"

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 10.09 ton/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-473-S1

⁽¹⁾ This is the calculated maximum LDAR controlled VOC emissions, as calculated by EPA-453/R-95-017, and based on revised count of components in project 12-198, plus 10% as requested.

Pollutant: Single HAP

Emission Limit(s): 9.4 ton/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 06-A-473-S1

Pollutant: Total HAP

Emission Limit(s): 24.4 ton/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 06-A-473-S1

⁽²⁾ Plant-wide limits.

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.

Operating Limits

- A. The owner or operator shall follow the applicable requirements of Subpart VV, 40 CFR §60.480 through 40 CFR §60.489

Reporting and Recordkeeping

- A. 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-473-S1
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

NSPS Applicability

This facility is subject to NSPS Subpart A – General Provisions and Subpart VV – Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry.

Authority for Requirement: DNR Construction Permit 06-A-473-S1

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP-FS06

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
EU-FS06	Plant Roads	Fugitive Dust	51,566 miles/yr	06-A-474-S3

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): No Visible Emissions ⁽¹⁾

Authority for Requirement: DNR Construction Permit 06-A-474-S3
567 IAC 23.3(2)"c"(1)

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 20 ton/yr

Authority for Requirement: DNR Construction Permit 06-A-474-S3

Operational Limits & Reporting/Record keeping Requirements

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

- A. All haul roads within the facility shall be paved with the exception of the road segment leading to and from the temporary grain pile. Any spills on the road shall be cleaned up immediately.
- B. The owner or operator shall determine the silt loading on the paved roads once per month, prior to any road cleaning that may be done. After 12 tests, the company may request a review of these results to determine if a reduced sampling frequency is appropriate. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples. The owner or operator shall:
 - i. On a monthly basis, sample the silt loading at three (3) or more different locations. Sampling shall be completed prior to any cleaning done that day;
 - ii. On a monthly basis, conduct a performance test on the three (3) silt samples to determine the monthly silt content in g/m²; and

- iii. Maintain a monthly log for the paved haul road silt loading sampling showing the following:
 - a. The date and time of the performance testing;
 - b. The measured silt content in grams;
 - c. The silt load of the road for that month based on testing; and
 - d. The average silt loading (g/m²) based on the performance testing.
- C. The unpaved road segment shall only be used for activities related to moving grain to and from the temporary grain pile. Silt content sampling of the unpaved road surface shall be conducted at least once each calendar year during which grain is delivered to or removed from the temporary grain pile. This sampling shall be performed during the period of time of operation of the temporary grain pile. If the temporary grain pile is used for more than 3 months during any calendar year, samples shall be taken at least once every 3 months with a maximum of two samples per calendar year. After a minimum of 4 samples are analyzed, if the variability between the samples is less than 25%, then no additional sampling is required. If the variability of the samples is greater than 25%, then sampling shall be continued until a total of 8 samples have been obtained. After 8 samples have been obtained and analyzed, no additional sampling would be required. Silt content testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface/Bulk Dust Loading and C.2 Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples. The owner or operator shall:
 - i. Maintain a log for the unpaved haul road silt loading sampling showing the following:
 - a. The date and time of the performance testing;
 - b. The measured silt content in grams;
 - c. The silt load of the road for that month based on testing; and
 - d. The average silt loading (g/m²) based on the performance testing.
- D. The owner or operator shall record the number of trucks that load/unload material using the paved and unpaved haul roads on a monthly basis. Based on the number of trucks, the total paved road Vehicle Miles Traveled (VMT) and unpaved road Vehicle Miles Traveled (VMT) shall be calculated for that month. The owner or operator shall:
 - i. Maintain a monthly log of showing the following:
 - a. The number of trucks using the paved and unpaved roads; and
 - b. The paved and unpaved Vehicle Miles Traveled (VMT) for that month.
- E. The owner or operator shall not exceed 20 TPY of particulate matter (PM) emissions in any twelve month period, beginning with the initial 12-month period following the issuance of this permit. The owner or operator shall:

- i. On a monthly basis, calculate and record the monthly paved haul road emissions, in tons per month, according to the following formula, which uses an equation and empirical constants from AP-42 Section 13.2.1 and assumes a mean vehicle weight of 29 tons and 105 days of precipitation per year;

$$E_{PM} = \frac{[0.317 \times (sL)^{0.91}] \times VMT}{2000}$$

Where E_{PM} = tons of PM per month

sL = average road surface silt loading (g/m²) based on monthly silt loading performance tests

VMT = vehicle miles traveled

- ii. On a monthly basis, calculate and record the monthly unpaved haul road emissions, in tons per month, according to the following formula, which uses the equations and empirical constants from AP-42 Section 13.2.2 and assumes a mean vehicle weight of 29 tons and 105 days of precipitation per year;

$$E_{PM} = \frac{\left[13.6 \times \left(\frac{s}{12}\right)^{0.7}\right] \times VMT \times 0.71}{2000}$$

Where E_{PM} = tons of PM per month

s = average road surface material silt content percentage (%) based on silt content performance tests

VMT = vehicle miles traveled

- iii. On a monthly basis, calculate and record the total paved and unpaved haul road emissions, in tons per month; and
- iv. On a monthly basis, calculate and record the rolling 12-month total paved and unpaved haul road emissions, in tons.

Authority for Requirement: DNR Construction Permit 06-A-474-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-FS07

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-FS07	Cooling Tower	CE-C15: 0.005% Mist Eliminator	Water	25,000 gal/min	20-A-087-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 20-A-087-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): 1.56 lb/hr, 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 20-A-087-S1
567 IAC 23.3(2)"a"

Pollutant: PM₁₀

Emission Limit(s): 1.56 lb/hr

Authority for Requirement: DNR Construction Permit 20-A-087-S1

Pollutant: PM_{2.5}

Emission Limit(s): 1.56 lb/hr

Authority for Requirement: DNR Construction Permit 20-A-087-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 total dissolved solids (TDS) of the water used in Cooling Tower EU FS07 shall not exceed 2500 ppm:
 - i. Record the analysis of the TDS of the water used for each quarter this emission unit is in use.

B. Chromium based and VOC- or HAP-containing water treatment chemicals (i.e. biocides, fungicides, scale inhibitors, etc.) shall not be used in this emission unit.

- i. Retain a copy of the Safety Data Sheet (SDS) for each water treatment chemical used in this emission unit.

Authority for Requirement: DNR Construction Permit 20-A-087-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 41

Stack Opening, (inches, dia.): 288

Exhaust Flow Rate (scfm): 630,045

Exhaust Temperature (°F): 85

Discharge Style: Vertical unobstructed

Authority for Requirement: DNR Construction Permit 20-A-087-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-TK001; EP-TK002

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-TK001	EU-TK001	200 Proof Ethanol Storage Tank	CE-TK001: Internal Floating Roof	200 Proof Ethanol	184,962 gallons	06-A-475-S2
EP-TK002	EU-TK002	200 Proof Ethanol Storage Tank	CE-TK002: Internal Floating Roof	200 Proof Ethanol	184,962 gallons	06-A-476-S2

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.

There are no applicable emission limits 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 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).

B. This tank shall be used to store only 200 proof ethanol.

Authority for Requirement: DNR Construction Permit 06-A-475-S2, 06-A-476-S2
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NSPS Applicability

These tanks are subject to the following NSPS subparts:

40 CFR 60 Subpart A – General Provisions

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Authority for Requirement: DNR Construction Permit 06-A-475-S2, 06-A-476-S2
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): NA – Natural Vent

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 06-A-475-S2, 06-A-476-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-TK003

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EU-TK003	Denaturant Storage Tank	CE-TK003: Internal Floating Roof	Denaturant	63,415 gal	06-A-477-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.

There are no applicable emission limits 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 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).

B. This tank shall be used to store only denaturant.

Authority for Requirement: DNR Construction Permit 06-A-477-S2
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NSPS Applicability

This tank is subject to the following NSPS subparts:

40 CFR 60 Subpart A – General Provisions

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Authority for Requirement: DNR Construction Permit 06-A-477-S2
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): NA – Natural Vent

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permit 06-A-477-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-TK004; EP-TK005

Associated Equipment

Emission Point	Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
EP-TK004	EU-TK004	Denatured Ethanol Storage Tank	CE-T004: Internal Floating Roof	Denatured Ethanol	619,217 gallons	06-A-478-S3
EP-TK005	EU-TK005	Denatured Ethanol Storage Tank	CE-T005: Internal Floating Roof	Denatured Ethanol	619,217 gallons	06-A-479-S3

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.

There are no applicable emission limits 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 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).

B. This tank shall be used to store only denatured or anhydrous ethanol.

Authority for Requirement: DNR Construction Permits 06-A-478-S3, 06-A-479-S3
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NSPS Applicability

These tanks are subject to the following NSPS subparts:

40 CFR 60 Subpart A – General Provisions.

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Authority for Requirement: DNR Construction Permits 06-A-478-S3, 06-A-479-S3
40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): NA – Natural Vent

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permits 06-A-478-S3, 06-A-479-S3

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 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, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, 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.
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
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(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
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(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

Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(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

Links to Standards

- A. 40 CFR Part 60 Subpart A – General Provisions
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A>
- B. 40 CFR Part 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial Steam Generating Units
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Dc>
- C. 40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Kb>
- D. 40 CFR Part 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>
- E. 40 CFR Part 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>
- F. 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP)
<https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ>