

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

Name of Permitted Facility: POET Biorefining - Jewell

Facility Location: 2601 320th Street, Jewell, IA 50130

Air Quality Operating Permit Number: 14-TV-004

Expiration Date: March 31, 2019

Permit Renewal Application Deadline: September 30, 2018

EIQ Number: 92-6943

Facility File Number: 40-02-002

Responsible Official

Name: Kevin Monroe

Title: General Manager

Mailing Address: 2601 320th Street, Jewell, IA 50130

Phone #: (515) 827-6050

Permit Contact Person for the Facility

Name: Kevin Monroe

Title: General Manager

Mailing Address: 2601 320th Street, Jewell, IA 50130

Phone #: (515) 827-6050

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

Lori Hanson, Supervisor of Air Operating Permits Section

Date

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Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE	control equipment
CEM.....	continuous emission monitor
°F.....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP.....	emission point
EU	emission unit
gr./dscf	grains per dry standard cubic foot
gr./100 cf.....	grains per one hundred cubic feet
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
MVAC.....	motor vehicle air conditioner
NAICS.....	North American Industry Classification System
NSPS.....	new source performance standard
ppmv	parts per million by volume
lb./hr	pounds per hour
lb./MMBtu	pounds per million British thermal units
SCC.....	Source Classification Codes
scfm.....	standard cubic feet per minute
SIC.....	Standard Industrial Classification
TPY.....	tons per year
USEPA.....	United States Environmental Protection Agency

Pollutants

PM.....	particulate matter
PM ₁₀	particulate matter ten microns or less in diameter
SO ₂	sulfur dioxide
NO _x	nitrogen oxides
VOC.....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

I. Facility Description and Equipment List

Facility Name: POET Biorefining - Jewell

Permit Number: 14-TV-004

Facility Description: Fuel-Grade Ethyl Alcohol Manufacturing (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP SV1	EU1, EU2, EU3	3 Receiving Pits, Elevator, 6 Grain Bins	05-A-424-S5
EP SV2	EU4	Corn Scalper, Conveyor, Surge Bin	05-A-425-S1
EP SV3	EU5	Hammermill 1	05-A-426-S2
EP SV4	EU6	Hammermill 2	05-A-427-S2
EP SV5	EU7	Hammermill 3	05-A-428-S2
EP SV6	EU8	Hammermill 4	05-A-429-S2
EP SV20	EU24	Hammermill 5	06-A-317-S1
EP SV7	EU9, EU10	6 Fermenters, Beer Well, Distillation Process (RTO Bypass Stack)	05-A-430-S4
EP SV8	EU9, EU10, EU11, EU12, EU14, EU15, EU16, EU17	Fermentation/Distillation/DDGS Dryers	05-A-431-S5
EP SV9	EU18	DDGS Fluid Bed Cooler	05-A-432-S4
EP SV10	EU19	DDGS Storage Silo	05-A-433-S2
EP SV11	EU20	DDGS Storage Silo Bypass	05-A-434-S4
EP SV12	EU21	Boiler 1	05-A-435-S2
EP SV13	EU22	Boiler 2	05-A-436-S2
EP SV14	EUTK-001	190 Proof Ethanol Storage Tank	05-A-437-S3
EP SV15	EUTK-002	Denaturant Storage Tank	05-A-438-S3
EP SV16	EUTK-003	200 Proof Ethanol Storage Tank	05-A-439-S4
EP SV17	EUTK-004	200 Proof Ethanol Storage Tank	05-A-440-S4
EP SV18	EUTK-005	Denaturant or 200 Proof Storage Tank	05-A-441-S4
EP SV19	EU25	Diesel Generator 2000 kW	05-A-442-S3
EP SV Flare	EUFLAREa, EUFLAREb	Truck and Rail Loadout	05-A-445-S4
EP F001	EUF001	Fugitive Emissions Grain Receiving	None
EP F002	EUF002	Haul Roads	05-A-446-S3
EP F003	EUF003	Fugitive Emissions DDG Handling	None
EP F004	EUF004	Equipment Leaks	05-A-444-S2
EP F005	EUF005	Cooling Towers	05-A-443-S1

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
EU 26	Corn Oil Extraction System
EU 27	Corn Oil Storage Tanks (2)
EU WP	Wetcake Production

II. Plant-Wide Conditions

Facility Name: POET Biorefining – Jewell
Permit Number: 14-TV-004

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

Permit Duration

The term of this permit is: 5 years
Commencing on: April 1, 2014
Ending on: March 31, 2019

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 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 SV1, EP SV7, EP SV8, EP SV12, EP SV 13, EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, EP SV Flare, and EP F004.

See Appendix for a 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 Db Requirements

This facility is subject to Standards of Performance for Industrial Commercial Institutional Steam Generating Units. The affected units are EP SV12 and EP SV 13.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 60 Subpart Db
567 IAC 23.1(2) "ccc"

40 CFR 60 Subpart DD Requirements

This facility is subject to Standards of Performance for Grain Elevators. The affected unit is EP SV1.

See Appendix for the link of the Standard.

Authority for Requirements: 40 CFR 60 Subpart DD
567 IAC 23.1(2) "ooo"

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 SV14, EP SV15, EP SV16, EP SV17, and EP SV18.

See Appendix for a link to the Standard.

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

40 CFR 60 Subpart VVa Requirements

This facility is subject to Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. The affected units are EP SV7, EP SV8, EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, EP SV Flare, and EP F004.

See Appendix for a link to the Standard.

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

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines (RICE NESHAP). The affected unit is EP SV19.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart ZZZZ

III. Emission Point-Specific Conditions

Facility Name: POET Biorefining - Jewell
Permit Number: 14-TV-004

Emission Point ID Number: EP SV1

Associated Equipment

Associated Emission Unit ID Numbers: EU1, EU2, EU3
Emissions Control Equipment ID Number: CS1
Emissions Control Equipment Description: Pulse Jet Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU1, EU1, EU3
Emission Unit Description: 3 Receiving Pits, Elevator, 6 Grain Bins
Raw Material/Fuel: Grain
Rated Capacity: 840 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): 0%
Authority for Requirement: DNR Construction Permit 05-A-424-S5
567 IAC 23.1(2) "ooo"

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 1.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-424-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.0 lb/hr; 0.01 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-424-S5
567 IAC 23.1(2) "ooo"

Operational Limits & Requirements

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

Operating Limits

A. The maximum amount of corn received and/or processed at Poet Biorefining – Jewell (Plant

- No. 40-02-002) shall not exceed 28.47 million bushels of corn per rolling 12-month period.
- B. The owner or operator shall inspect and maintain the control equipment according to manufacturer's recommendations.
 - C. The grain bins shall be filled only while under negative pressure control and vented to the control equipment.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record on a monthly basis, the amount of corn received at Poet Biorefining – Jewell (Plant No. 40-02-002) in bushels. Calculate and record rolling 12-month totals.
- B. Record on a monthly basis, the amount of corn processed at Poet Biorefining – Jewell (Plant No. 40-02-002) in bushels. Calculate and record rolling 12-month totals.
- C. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 05-A-424-S5

NSPS and NESHAP Applicability

This emission point is subject to New Source Performance Standards (NSPS) Subpart DD - Standards of Performance for Grain Elevators and Subpart A - General Provisions.

Authority for Requirement: DNR Construction Permit 05-A-424-S50
40CFR Part 60 Subpart DD

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 85

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 23,500

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-424-S5

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed

corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >0 % is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.

Authority for Requirement: 567 IAC 22.108(14)

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV2

Associated Equipment

Associated Emission Unit ID Numbers: EU4

Emissions Control Equipment ID Number: CS2

Emissions Control Equipment Description: Pulse Jet Baghouse

Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU4

Emission Unit Description: Corn Scalper, Conveyor, Surge Bin

Raw Material/Fuel: Corn

Rated Capacity: 140 tons/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 05-A-425-S1
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 (PM₁₀)

Emission Limit(s): 0.107 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-425-S1

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.107 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-425-S1
567 IAC 23.4(7)

Operational Limits & Requirements

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

Operating Limits

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

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 05-A-425-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): 12

Exhaust Flow Rate (scfm): 2500

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical, Obstructed

Authority for Requirement: DNR Construction Permit 05-A-425-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 Numbers: EP SV3, EP SV4, EP SV5, EP SV6, EP SV20

Associated Equipment

EP	EU	Emissions Control Equipment ID Number	Emissions Control Equipment Description	Continuous Emissions Monitors ID Numbers
EP SV3	EU5	CS3	Pulse Jet Baghouse	None
EP SV4	EU6	CS4		
EP SV5	EU7	CS5		
EP SV6	EU8	CS6		
EP SV20	EU24	CS21		

EP	EU Vented Through EP	Emissions Unit Description	Raw Material/Fuel	Rated Capacity (tons/hr)	Construction Permit Number
EP SV3	EU5	Hammermill 1	Grain	22	05-A-426-S2
EP SV4	EU6	Hammermill 2		22	05-A-427-S2
EP SV5	EU7	Hammermill 3		22	05-A-428-S2
EP SV6	EU8	Hammermill 4		22	05-A-429-S2
EP SV20	EU24	Hammermill 5		22	06-A-317-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 Permits 05-A-426-S2, 05-A-427-S2, 05-A-428-S2, 05-A-429-S2, 06-A-317-S1
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 (PM₁₀)

Emission Limit(s): 0.51 lb/hr

Authority for Requirement: DNR Construction Permits 05-A-426-S2, 05-A-427-S2, 05-A-428-S2, 05-A-429-S2, 06-A-317-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.51 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 05-A-426-S2, 05-A-427-S2,
05-A-428-S2, 05-A-429-S2, 06-A-317-S1
567 IAC 23.4(7)

Operational Limits & Requirements

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

Operating Limits

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

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permits 05-A-426-S2, 05-A-427-S2,
05-A-428-S2, 05-A-429-S2, 06-A-317-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15

Stack Opening, (inches, dia.): 16 x 16

Exhaust Flow Rate (scfm): 12,000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 05-A-426-S2, 05-A-427-S2,
05-A-428-S2, 05-A-429-S2, 06-A-317-S1

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV7 (RTO Bypass)

Associated Equipment

Associated Emission Unit ID Numbers: EU9, EU10
Emissions Control Equipment ID Number: CS7
Emissions Control Equipment Description: Packed Bed Wet Scrubber
Continuous Emissions Monitors ID Numbers: None

EU	Emissions Unit Description	Raw Material/Fuel	Maximum Capacity
EU9	6 Batch Mash Fermenters	Corn Mash	730, 000 gal/fermenter 208 tons/hr mash
	Beer Well	Beer	889,000 gallons
EU10	Distillation Process: Evaporator, Strippers, (3) Sieves, Rectifier	Beer	850 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 05-A-430-S4
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 (PM₁₀)

Emission Limit(s): 0.3 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-430-S4

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.3 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-430-S4
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 24.30 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-430-S4

Pollutant: Single HAP ⁽²⁾

Emission Limit(s): 5.72 lb/hr; 1.43 tons/yr ⁽³⁾

Authority for Requirement: DNR Construction Permit 05-A-430-S4

⁽²⁾ The specific Individual HAPs, for which this emission limit applies, are acetaldehyde, acrolein, formaldehyde, and methanol.

Pollutant: Total HAP

Emission Limit(s): 8.58 lb/hr; 2.15 tons/yr ⁽³⁾

Authority for Requirement: DNR Construction Permit 05-A-430-S4

⁽³⁾ Potential emissions based on an operational limit of 500 hours per rolling 12-month period for the RTO bypass stack.

Operational Limits & Requirements

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

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's recommendations.
- B. The emissions normally vented from the Scrubber to the RTO may bypass the thermal oxidizer (EP SV8) a maximum of 500 hours per twelve-month rolling period.
- C. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added at a rate greater than or equal to the rate recorded during a previous performance test that demonstrated compliance with all applicable emission limitations.
- D. The owner or operator shall follow the applicable standards of Subpart VVa, 40 CFR 60.480a through 60.489a.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall keep a log of control equipment inspection and maintenance.
- B. The owner or operator shall keep a record of the number of hours the emission units are operated without being controlled by the thermal oxidizer of EP SV8, and update the twelve month rolling total on a monthly basis.
- C. Record the rate of additive added (additive feed rate) to the scrubber liquid on a continuous basis. If the additive feed rate deviates below the rate required (i.e., additive feed rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and also when the additive feed rate is greater than or equal to the required additive feed rate
- D. The owner or operator shall keep records as required in 40 CFR 60.486a, and reports as required in 40 CFR 60.487a.

Authority for Requirement: DNR Construction Permit 05-A-430-S4

NSPS and NESHAP Applicability

This emission point is subject to the requirements/conditions of New Source Performance Standards (NSPS) Subpart VV- *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* as specified in 40 CFR Part 60 §60.480.

However, the facility has chosen to comply with the provisions of NSPS Subpart VVa - *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006* (40 CFR Part 60 §60.480a) to satisfy the requirements of NSPS VV.

This emission point is also subject to the requirements/conditions of NSPS Subpart A-*General Provisions*.

Authority for Requirement: DNR Construction Permit 05-A-430-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 68
- Stack Opening, (inches, dia.): 24
- Exhaust Flow Rate (scfm): 7500
- Exhaust Temperature (°F): Ambient
- Discharge Style: Vertical, Unobstructed
- Authority for Requirement: DNR Construction Permit 05-A-430-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutant – VOC, Single HAP and Total HAPs
Test Method – see the table below

Pollutant	Frequency	Test Run Time	Test Method
VOC	See Footnote 1	1 hour	40 CFR 60, Appendix A, Method 18 or According to DNR Approved Method
Individual HAP ⁽²⁾	See Footnote 1	1 hour	40 CFR 60, Appendix A, Method 18
Total HAP	See Footnote 1	1 hour	40 CFR 60, Appendix A, Method 18

⁽¹⁾ Stack testing shall be conducted in a manner to verify compliance with all emission limitations with all equipment operating in a worst case scenario. Stack testing shall be required within 180 days after emissions have been vented through this emission point for greater than 350 hours in a rolling 12-month period.

⁽²⁾ Acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically. With the exception of acrolein, acetaldehyde, formaldehyde and methanol, any HAP whose emissions are below the detection limit shall be assumed to be zero.

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)

Authority for Requirement: DNR Construction Permit 05-A-430-S4

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV8

Associated Equipment

Associated Emission Unit ID Numbers: EU9, EU10, EU14, EU15, EU16, EU17, EU11, EU12

Emissions Control Equipment ID Number: CS7, CS8, CS9, CS10

Emissions Control Equipment Description: Packed Bed Wet Scrubber, 2 Multiclones,
Regenerative Thermal Oxidizer

Continuous Emissions Monitors ID Numbers: None

EU	Emissions Unit Description	Maximum Capacity
EU9	6 Batch Mash Fermenters	730,000 gallons per fermenter 208 Tons of Mash per hour
	Beer Well	889,000 gallons
EU10	Distillation Process: Evaporator, Strippers, (3) Sieves, Rectifier	850 gallons of beer per minute
EU14	Centrifuge #1	27 ton of whole stillage per hour per centrifuge
EU15	Centrifuge #2	
EU16	Centrifuge #3	
EU17	Centrifuge #4	
EU11	DDGS Dryer 1	23 tons of dried DDGS per hour per dryer 60 MMBtu per hour per dryer
EU12	DDGS Dryer 2	

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-431-S5
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 (PM₁₀)

Emission Limit(s): 6.50 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-431-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 6.50 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-431-S5
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.11 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 05-A-431-S5
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 10.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-431-S5

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 5.29 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-431-S5

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 11.73 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-431-S5

Pollutant: Single HAP
Emission Limit(s): 0.48 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-431-S5

⁽²⁾ The specific Individual HAPs, for which this emission limit applies, are acetaldehyde, acrolein, formaldehyde, and methanol.

Pollutant: Total HAP
Emission Limit(s): 0.95 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-431-S5

Operational Limits & Requirements

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

Operating Limits

- A. The owner or operator shall maintain the 3-hour average operating temperature of the Regenerative Thermal Oxidizer (CS10) at no less than 50 degrees Fahrenheit below the average operating temperature the Regenerative Thermal Oxidizer (CS10) recorded during the most recent performance test that demonstrated compliance with the emission limits.
- B. The Regenerative Thermal Oxidizer (CS10) shall be operated at all times the dryers or non-bypassed fermentation equipment is being used.
- C. The DDGS Dryers (EU11 and EU12) and the Regenerative Thermal Oxidizer (CS10) shall only combust natural gas, process off-gasses or a combination of both.

- D. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added at a rate greater than or equal to the rate recorded during a previous performance test that demonstrated compliance with all applicable emission limitations.
- E. The owner or operator shall follow the applicable standards of NSPS Subpart VVa, 40 CFR Part 60.480a through 60.489a.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall keep hourly records of the operating temperature of the Regenerative Thermal Oxidizer (CS10), in degrees Fahrenheit. Calculate and record each three-hour average.
- B. Maintain a record of the average operating temperature of the Regenerative Thermal Oxidizer (CS10) during the most recent performance test that demonstrated compliance with the emission limits.
- C. The owner or operator shall keep records of the frequency and amount of time the Regenerative Thermal Oxidizer (CS10) malfunctions and record estimates of the emissions during said malfunctions. All excess emission reporting shall be conducted in accordance with Conditions 6 and 8 of the construction permit.
- D. Record the rate of additive added (additive feed rate) to the scrubber liquid on a continuous basis. If the additive feed rate deviates below the rate required (i.e., additive feed rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and also when the additive feed rate is greater than or equal to the required additive feed rate.
- E. The owner or operator shall keep records as required in 40 CFR Part 60.480a through 60.489a.

Authority for Requirement: DNR Construction Permit 05-A-431-S5

NSPS and NESHAP Applicability

This emission point is subject to the requirements/conditions of New Source Performance Standards (NSPS) Subpart VV- *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* as specified in 40 CFR Part 60 §60.480.

However, the facility has chosen to comply with the provisions of NSPS Subpart VVa - *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006* (40 CFR Part 60 §60.480a) to satisfy the requirements of NSPS VV.

This emission point is also subject to the requirements/conditions of NSPS Subpart A-*General Provisions*.

Authority for Requirement: DNR Construction Permit 05-A-431-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 100
- Stack Opening, (inches, dia.): 76
- Exhaust Flow Rate (scfm): 76,100
- Exhaust Temperature (°F): 320
- Discharge Style: Vertical, Unobstructed
- Authority for Requirement: DNR Construction Permit 05-A-431-S5

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Stack Testing:

Pollutants – NO_x, VOC, CO, Single HAP, Total HAP
Test Method – see the table below

Pollutant	Frequency	Test Run Time	Test Method
NO _x	One time	1 hour	40 CFR 60, Appendix A, Method 7E
VOC	One time	1 hour	40 CFR 60, Appendix A, Method 18 or According to IDNR Approved Method
CO	One time	1 hour	40 CFR 60, Appendix A, Method 10
Individual HAP ⁽¹⁾	One time	1 hour	40 CFR 60, Appendix A, Method 18
Total HAP ⁽¹⁾⁽²⁾	One time	1 hour	40 CFR 60, Appendix A, Method 18

⁽¹⁾Acrolein, acetaldehyde, formaldehyde and methanol shall be test for specifically. The HAP compounds that test below detection limits shall be assumed to be emitting at a rate equal to the detection limit.

The owner or the owner’s authorized agent shall verify compliance with the emission limitations within sixty (60) days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment (i.e., 6th fermenter).

Authority for Requirement: DNR Construction Permit 05-A-431-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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP SV9

Associated Equipment

Associated Emission Unit ID Numbers: EU18
Emissions Control Equipment ID Number: CS12
Emissions Control Equipment Description: Pulse Jet Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU18
Emission Unit Description: DDGS Fluid Bed Cooler
Raw Material/Fuel: DDGS
Rated Capacity: 23 tons/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 05-A-432-S4
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 1.02 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-432-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.02 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-432-S4
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.26 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-432-S4

Pollutant: Single HAP
Emission Limit(s): 1.0 lb/hr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-432-S4

⁽²⁾ The specific Individual HAPs, for which this emission limit applies, are acetaldehyde, acrolein, formaldehyde, and methanol.

Pollutant: Total HAP

Emission Limit(s): 1.59 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-432-S4

Operational Limits & Requirements

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

Operating Limits

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

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 05-A-432-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 70

Stack Opening, (inches, dia.): 36

Exhaust Flow Rate (scfm): 22,500

Exhaust Temperature (°F): 100

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-432-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV10

Associated Equipment

Associated Emission Unit ID Numbers: EU19
Emissions Control Equipment ID Number: CS13
Emissions Control Equipment Description: Pulse Jet Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU19
Emission Unit Description: DDGS Storage Silo
Raw Material/Fuel: DDGS
Rated Capacity: 26 tons/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 05-A-433-S2
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.171 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-433-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-433-S2
567 IAC 23.4(7)

Operational Limits & Requirements

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

Operating Limits

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

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 05-A-433-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 121

Stack Opening, (inches, dia.): 18 x 18

Exhaust Flow Rate (scfm): 4000

Exhaust Temperature (8F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-433-S2

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV11

Associated Equipment

Associated Emission Unit ID Numbers: EU20
Emissions Control Equipment ID Number: CS14
Emissions Control Equipment Description: Pulse Jet Baghouse
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU20
Emission Unit Description: DDGS Storage Silo Bypass
Raw Material/Fuel: DDGS
Rated Capacity: 26 tons/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 05-A-434-S4
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 (PM₁₀)
Emission Limit(s): 0.171 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-434-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.171 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-434-S4
567 IAC 23.4(7)

Operational Limits & Requirements

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

Operating Limits

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

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

A. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: DNR Construction Permit 05-A-434-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 86

Stack Opening, (inches, dia.): 24

Exhaust Flow Rate (scfm): 4000

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 05-A-434-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 SV12, EP SV13

Associated Equipment

Associated Emission Unit ID Numbers: EU21, EU22

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: NA

Continuous Emissions Monitors ID Numbers: None

Emission Units vented through these Emission Points: EU21, EU22

Emission Unit Description: Boiler #1, Boiler #2

Raw Material/Fuel: Natural Gas

Rated Capacity: 143 MMBtu/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 05-A-435-S2, 05-A-436-S2
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.07 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.07 lb/hr; 0.6 lb/MMBtu

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2
567 IAC 23.3(2) "b" (3)

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.1 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 5.72 lb/hr; 0.1 lb/MMBtu ⁽²⁾

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2
40 CFR 60.44b

⁽²⁾ 40 CFR 60.44b(a)(1)(i), (h), and (i) – This standard applies at all times including periods of startup, shutdown, and malfunction. Compliance is determined on a 30-day rolling average basis.

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.77 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.01 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2

NSPS and NESHAP Applicability

This emission point is subject to New Source Performance Standards (NSPS) Subpart Db - *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.

Authority for Requirement: 40 CFR Part 60 Subpart Db

Operational Limits & Requirements

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

Operating Limits

- A. The owner or operator shall combust only natural gas in this unit.
- B. The owner or operator shall follow the applicable standards of Subpart Db, 40 CFR 60.40b through 60.49b

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor on a 12 month rolling average basis with a new annual capacity factor calculated at the end of each calendar month, as required in 40 CFR 60.49b(d). The annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit during a calendar year, and the potential heat input had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- B. The owner or operator shall maintain records of the following information for each steam generating unit operating day, as required in 40 CFR 60.49b(g). This information shall also be submitted in a report, as required in 40 CFR 60.49b(i).
 - 1. Calendar date.
 - 2. Average hourly nitrogen oxides emission (as NO₂) rates measured or predicted.
 - 3. 30-day average nitrogen oxides emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
 - 4. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the emission standard, with the reason for such excess emissions as well as a description of corrective actions taken.

5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
7. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
8. Identification of the times when the pollutant concentrations exceeded the full span of the continuous monitoring system.
9. Description of any modifications to the continuous monitoring system that could affect the ability of the CMS to comply with Performance Specification 2 or 3.
10. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Appendix F, Procedure 1.

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75

Stack Opening, (inches, dia.): 54

Exhaust Flow Rate (acfm): 40,000

Exhaust Temperature (°F): 280

Discharge Style: Vertical, Unobstructed

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Continuous Emissions Monitoring:

Pollutant - NO_x

Operational Specifications – 40 CFR 60 Appendix B

Date of Initial System Calibration and Quality Assurance – September 2011

Ongoing System Calibration/Quality Assurance - 40 CFR 60

Reporting & Record keeping - 40 CFR 60

Authority for Requirement - DNR Construction Permit 05-A-435-S2, 05-A-436-S2

The owner of this equipment or the owner's authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: DNR Construction Permit 05-A-435-S2, 05-A-436-S2
567 IAC 22.108(3)

Emission Point ID Number: EP SV14

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-001
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Internal Floating Roof
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-001
Emission Unit Description: 190 Proof Storage Tank
Raw Material/Fuel: Ethanol
Rated Capacity: 250,000 gal

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.34 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-437-S3

⁽¹⁾ Calculated potential emissions are 0.34 tons per 12-month rolling period.

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-437-S3

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-437-S3

⁽²⁾ Facility-wide limit established to keep the facility minor for NESHAP applicability as defined in 40 CFR Part 63 §63.2.

Operational Limits & Requirements

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

Operating Limits

- A. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60§112b(a)(1).
- B. The amount of ethanol processed at the facility annually shall not exceed 79.8 Million Gallons of denatured ethanol per rolling 12 month period.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record and report as specified in 40 CFR Part 60§60.116b(a), *Reporting and recordkeeping requirements.*
- B. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep copies of all records required by 60§60.116b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR 60§60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
- E. Record monthly, the facility-wide denatured ethanol throughput in gallons. Calculate and record 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 05-A-437-S3

NSPS and NESHAP Applicability

These storage tanks are subject to the following NSPS subparts:

Subpart A – *General Provisions*

Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 05-A-437-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 05-A-437-S3

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Associated Emission Unit ID Numbers: EU TK-002
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Internal Floating Roof
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-002
Emission Unit Description: Denaturant Storage Tank
Raw Material/Fuel: Denaturant
Rated Capacity: 270,000 gal

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.00 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-438-S3

⁽¹⁾ Calculated potential emissions are 1.00 tons per 12-month rolling period.

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-438-S3

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-438-S3

⁽²⁾ Facility-wide limit established to keep the facility minor for NESHAP applicability as defined in 40 CFR Part 63 §63.2.

Operational Limits & Requirements

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

Operating Limits

- A. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60§112b(a)(1).
- B. The facility shall limit the use of denaturant to 8.6 million gallons per year per 12 month rolling basis.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record and report as specified in 40 CFR Part 60§60.116b(a), *Reporting and recordkeeping requirements.*
- B. Record as specified in 40 CFR Part 60§60.116b(a), the owner of operator shall keep copies of all records required by 60§60.116b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR 60§60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
- E. Record monthly, the facility-wide denaturant throughput in gallons. Calculate and record 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 05-A-438-S3

NSPS and NESHAP Applicability

These storage tanks are subject to the following NSPS subparts:

Subpart A – *General Provisions*

Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 05-A-438-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 05-A-438-S3

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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, EP SV17

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-003, EU TK-004
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Internal Floating Roof
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-003, EU TK-004
Emission Unit Description: 200 Proof Ethanol Storage Tank
Raw Material/Fuel: Ethanol
Rated Capacity: 1,500,000 gal

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.18 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

⁽¹⁾ Calculated potential emissions are 0.18 tons per 12-month rolling period (each).

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

⁽²⁾ Facility-wide limit established to keep the facility minor for NESHAP applicability as defined in 40 CFR Part 63 §63.2.

Operational Limits & Requirements

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

Operating Limits

- A. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60§112b(a)(1).
- B. The amount of ethanol processed at the facility annually shall not exceed 79.8 million gallons of denatured ethanol per rolling 12 month basis.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record and report as specified in 40 CFR Part 60§60.116b(a), *Reporting and recordkeeping requirements.*
- B. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep copies of all records required by 60§60.116b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR 60§60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
- E. Record monthly, the facility-wide denaturant throughput in gallons. Calculate and record 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

NSPS and NESHAP Applicability

These storage tanks are subject to the following NSPS subparts:

Subpart A – *General Provisions*

Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 51

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 05-A-439-S4; 05-A-440-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Associated Equipment

Associated Emission Unit ID Numbers: EU TK-005
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Internal Floating Roof
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU TK-005
Emission Unit Description: Denaturant or 200 Proof Storage Tank
Raw Material/Fuel: Denaturant or Ethanol
Rated Capacity: 126,900 gal

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.50 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-441-S4

⁽¹⁾ Calculated potential emissions are 1.50 tons per 12-month rolling period.

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-441-S4

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-441-S4

⁽²⁾ Facility-wide limit established to keep the facility minor for NESHAP applicability as defined in 40 CFR Part 63 §63.2.

Operational Limits & Requirements

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

Operating Limits

- A. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60§112b(a)(1).
- B. The amount of ethanol processed at the facility annually shall not exceed 79.8 Million Gallons of denatured ethanol per rolling 12-month period.
- C. The facility shall limit the use of denaturant to 8.6 million gallons per year per 12 month rolling basis.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record and report as specified in 40 CFR Part 60§60.116b(a), *Reporting and recordkeeping requirements.*
- B. Record as specified in 40 CFR Part 60§60.116b(a), the owner of operator shall keep copies of all records required by 60§60.116b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60§60.116b(a), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
- D. As specified in 40 CFR 60§60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
- E. Record monthly, the facility-wide denatured ethanol throughput in gallons. Calculate and record 12-month rolling totals.
- F. Record monthly, the facility-wide denaturant throughput in gallons. Calculate and record 12-month rolling totals.

Authority for Requirement: DNR Construction Permit 05-A-441-S4

NSPS and NESHAP Applicability

These storage tanks are subject to the following NSPS subparts:

Subpart A – *General Provisions*

Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels*

Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced after November 7, 2006*

Authority for Requirement: DNR Construction Permit 05-A-441-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 29

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): Working and Breathing Losses

Exhaust Temperature (°F): Ambient

Discharge Style: Downwards

Authority for Requirement: DNR Construction Permit 05-A-441-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 SV19

Associated Equipment

Associated Emission Unit ID Numbers: EU25
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: NA
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EU25
Emission Unit Description: Emergency Diesel Generator
Raw Material/Fuel: Diesel
Rated Capacity: 2000 kW

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-442-S3
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 (PM₁₀)

Emission Limit(s): 2.66 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-442-S3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 2.66 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 05-A-442-S3
567 IAC 23.3(2) "a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 05-A-442-S3

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 54.12 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-442-S3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 1.71 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-442-S3

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 16.15 lb/hr

Authority for Requirement: DNR Construction Permit 05-A-442-S3

Operational Limits & Requirements

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

Operating Limits

- A. This unit shall be operated a maximum of 200 hours per twelve month rolling period.
- B. The diesel fuel fired in this engine shall be limited to a maximum sulfur content of 0.5% by weight.
- C. The operation of this unit for maintenance checking and readiness testing shall not exceed 100 hours per year.
- D. This unit shall not be operated for reasons other than maintenance checks, readiness testing, and emergency situations.
- E. A non-resettable hour meter must be installed to track the number of hours this unit operates.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Record each month the total hours of operation for this engine, EU 25, and the reason the engine was operated. Calculate and record rolling twelve-month totals.
- B. Maintain records of the compliance demonstration onsite.
- C. The owner or operator shall keep records of the sulfur content of the fuel combusted. This may be done by either ASTM-certified testing for each tank, or fuel oil vendor certification.

Authority for Requirement: DNR Construction Permit 05-A-442-S3

NSPS and NESHAP Applicability

This 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)(1)(iii) this compression ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

Per 63.6595(a)(1) you must comply with the provisions of Subpart ZZZZ that are applicable by May 3, 2013.

Fuel Requirements

No requirements except (beginning January 1, 2015) if you own or operate an existing emergency compression ignited stationary engine with a site rating of more than 100 bhp and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes

specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 63.6604(b).

Operation and Maintenance Requirements 40 CFR 63.6603, 63.6625, 63.6640 and Tables 2d and 6 to Subpart ZZZZ

1. Change oil and filter every 500 hours of operation or annually, whichever comes first. (See 63.6625(i) for the oil analysis option to extend time frame of requirements.)
2. Inspect air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary.
3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.
4. Operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
5. Install a non-resettable hour meter if one is not already installed.
6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing, emergency demand response and periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing and emergency demand response. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation,

including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

Notification and Reporting Requirements 40 CFR 63.6645, 63.6650 and Table 2d to Subpart ZZZZ

1. An initial notification is not required per 40 CFR 63.6645(a)(5)
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)
3. If you own or operate an emergency stationary RICE with a site rating of more than 100 bhp that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii) , you must submit an annual report. (See 40 CFR 63.6650(h) for additional information.)

Authority for Requirement: 40 CFR 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): 10
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (Scfm): 7600
Exhaust Temperature (°F): 800
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-442-S3

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 SV Flare

Associated Equipment

Associated Emission Unit ID Numbers: EUFLAREa, EUFLAREb
Emissions Control Equipment ID Number:
Emissions Control Equipment Description: Flare (Truck Loadout Only)
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EUFLAREa, EUFLAREb
Emission Unit Description: Ethanol Loadout Truck, Ethanol Loadout Rail
Raw Material/Fuel: Ethanol
Rated Capacity: 650 gal/min (Truck), 2400 gal/min (Rail)

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-445-S4
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 05-A-445-S4
567 IAC 23.3(2) "a"

Pollutant: Nitrogen Oxides (NOx)

Emission Limit(s): 0.53 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-445-S4

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 17.2 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-445-S4

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 3.30 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-445-S4

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-445-S4

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/yr ⁽²⁾
Authority for Requirement: DNR Construction Permit 05-A-445-S4

⁽²⁾ Facility-wide limit established to keep the facility minor for Title V and NESHAP applicability as defined in 40 CFR Part 63 §63.2. Calculated SHAP potential emissions are 0.34 tons per 12-month rolling period. Calculated THAP potential emissions are 0.55 tons per 12-month rolling period. Estimates are based on the maximum ethanol production rate at the facility.

Operational Limits & Requirements

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

Operating Limits

- A. The facility is limited to a maximum production/loadout of 79.8 million gallons of denatured ethanol per twelve month rolling period plant wide.
- B. The truck loadout shall be vented to a flare, with the exception of 1.5 million gallons per 12-month rolling period which may be loaded without being controlled by the flare.
- C. Truck loadouts may be switch-loaded (i.e. filled with denatured ethanol when the previous tank load was gasoline).
- D. The facility shall not load out by rail more than 50 million gallons per 12-month rolling period. Rail loadouts are not required to be controlled by the flare.
- E. All rail loadouts shall be to dedicated tank cars (i.e. no switch loading).
- F. Ethanol loadout shall be maintained and operated according to the specifications and requirements specified in 40 CFR 60§60.18(b)

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Each month, the owner or operator shall record the amount of denatured ethanol loaded out facility-wide, in gallons. Calculate and record the rolling 12-month totals.
- B. Each month, the owner or operator shall record the amount of denatured ethanol that is loaded out to trucks and not controlled by the flare, in gallons. Calculate and record rolling 12-month totals.
- C. Each month, the owner or operator shall record the amount of denatured ethanol that is loaded out to railcars, in gallons. Calculate and record rolling 12-month totals.
- D. The owner or operator shall maintain records that the flare complies with the specifications and requirements specified in 40 CFR Part 60§60.18(b).
- E. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the flare.

Authority for Requirement: DNR Construction Permit 05-A-445-S4

NSPS and NESHAP Applicability

This facility is subject to NSPS 40 CFR Part 60, Subpart A – *General Provisions* (40 CFR §60.1 through 40 CFR §60.19) and Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006.* (40 CFR §60.480a through 40 CFR §60.489a)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 20
- Stack Opening, (inches, dia.): 12
- Exhaust Flow Rate (scfm): 100
- Exhaust Temperature (°F): 1500
- Discharge Style: Vertical, Unobstructed
- Authority for Requirement: DNR Construction Permit 05-A-445-S4

The temperature and flow rate 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 design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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.

Facility operation and maintenance plans are to be developed by the facility within six(6) months of the issuance date of this permit and the data pertaining to the plan 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 F001

Associated Equipment

Associated Emission Unit ID Numbers: EUF001
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: NA
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EUF001
Emission Unit Description: Fugitive Emissions Grain Receiving
Raw Material/Fuel: Grain
Rated Capacity: 840 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%
Authority for Requirement: 567 IAC 23.3(2) "a"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)

Operational Limits & Requirements

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

Operational limits are not required 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 F002 (Plant-wide)

Associated Equipment

Associated Emission Unit ID Numbers: EUF002 (plant-wide)
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: NA
Continuous Emissions Monitors ID Numbers: None

Control Measure: Dust Suppression

Emission Unit vented through this Emission Point: EUF002
Emission Unit Description: Fugitive Dust Plant Haul Roads
Raw Material/Fuel: Fugitive Dust
Rated Capacity: N/A

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): ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-446-S3
567 IAC 23.3(2)"c"(1)

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

Pollutant: Particulate Matter (PM)

Emission Limit(s): 29.50 tons/yr ⁽²⁾

Authority for Requirement: DNR Construction Permit 05-A-446-S3

⁽²⁾ This is to be calculated based on tested silt content, number of trucks, (assuming trucks will be empty half of the miles traveled), and 0.8 miles per delivery or loadout, assuming 80% control. See Operating Limits & Requirements.

Operational Limits & Requirements

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

- A. The owner or operator shall apply chemical dust suppressants at the rate and frequency required by the manufacturer's specifications to achieve a minimum of 80% fugitive dust control or when the silt content exceeds 7.2% during a surface silt content test. If the selected chemical dust suppressant cannot be applied because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35.0 F (1.70 C), or conditions due to weather, in combination with the application of the chemical dust

suppressant, could create hazardous driving conditions, then the chemical dust suppressant application shall be postponed and applied as soon after the scheduled application date when the conditions preventing the application have been abated.

- B. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.
- C. Any spills on the road shall be cleaned up immediately.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall keep records of the number of trucks that unload/load material on a monthly basis.
- B. The owner or operator shall test a representative road for surface silt content once per month, prior to the application of dust suppressant. After 12 tests, the company may request that the DNR review the results and determine if there is still a need for continued testing.
- C. The owner or operator shall keep records of dust suppressant application (date, location of suppressant application, and amount). In addition, owner or operator shall document all deviations from scheduled chemical suppressant application (include date, scheduled location of suppressant application, reasons for not applying suppressant). The owner or operator shall also keep a copy of the manufacturer's specifications for achieving 80% dust suppression available for inspection.
- D. The owner or operator shall calculate and record the monthly fugitive dust emissions according to the following formula, which uses the equations from AP-42 Section 13.2.2, the PM empirical constants, and assumes a mean vehicle weight of 27.5 tons, 80% dust suppression, and an average of 0.8 miles per truck delivery or loadout.

$$E = V * 0.001062 * (s/12)^{0.7}$$

Where E = tons PM/month

V = number of trucks that month

s = surface silt content in % from that month's test results,
(8% silt content would be s = 8)

- E. The owner or operator shall update monthly the twelve month rolling total of PM emissions by adding up the calculated monthly emissions for the previous twelve months. Immediately notify the DNR if the twelve month rolling total exceeds 29.50 tons.

Authority for Requirement: DNR Construction Permit 05-A-446-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 F003

Associated Equipment

Associated Emission Unit ID Numbers: EUF003
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: NA
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EUF003
Emission Unit Description: Fugitive Emissions DDG Handling
Raw Material/Fuel: DDG
Rated Capacity: 240 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%
Authority for Requirement: 567 IAC 23.3(2) "a"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.4(7)

Operational Limits & Requirements

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

Operational limits are not required 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 F004 (Plant-wide)

Associated Equipment

Associated Emission Unit ID Numbers: EUF004
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Leak Detection and Repair (LDAR)
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EUF004
Emission Unit Description: VOC Emissions from Equipment Leaks
Raw Material/Fuel: VOC Emissions
Rated Capacity: NA

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 8.70 tons/yr
Authority for Requirement: DNR Construction Permit 05-A-444-S2

Pollutant: Single HAP
Emission Limit(s): 9.4 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-444-S2

Pollutant: Total HAP
Emission Limit(s): 24.4 tons/hr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-444-S2

⁽¹⁾ Facility-wide limit established to keep the facility minor for NESHAP applicability as defined in 40 CFR Part 63 §63.2. Calculated SHAP potential emissions are 0.69 tons per 12-month rolling period. Calculated THAP potential emissions are 0.70 tons per 12-month rolling period. Estimates are based on the maximum ethanol production rate at the facility.

Operational Limits & Requirements

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

Operating Limits

- A. The component count shall be documented as to the number and types of components used. Components include but are not limited to valves, pumps, compressor seals, flanges, etc.
- B. The owner or operator shall follow the applicable standards of NSPS Subpart VVa, 40 CFR 60.480a through 40 CFR 60.489a.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. Calculate and record the VOC emissions based on the documented component count. Update annualized VOC emission calculations as the component count varies. Emission factors shall be based on EPA document 453/R-95-017 entitled Protocol for Equipment Leak Emission Estimates.
- B. The owner or operator shall keep records as required in 40 CFR 60.486a, and reports as required in 40 CFR 60.487a.

Authority for Requirement: DNR Construction Permit 05-A-444-S2

NSPS and NESHAP Applicability

This facility is subject to NSPS 40 CFR Part 60, Subpart A – *General Provisions* (40 CFR §60.1 through 40 CFR §60.19) and Subpart VVa – *Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006* (40 CFR §60.480a through 40 CFR §60.489a).

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 F005

Associated Equipment

Associated Emission Unit ID Numbers: EUF005
Emissions Control Equipment ID Number: None
Emissions Control Equipment Description: Mist Eliminator
Continuous Emissions Monitors ID Numbers: None

Emission Unit vented through this Emission Point: EUF005
Emission Unit Description: Cooling Tower
Raw Material/Fuel: Water
Rated Capacity: 26,000 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: Particulate Matter (PM)
Emission Limit(s): 4.28 tons/yr ⁽¹⁾
Authority for Requirement: DNR Construction Permit 05-A-443-S1

⁽¹⁾ The emission limit is based on a drift loss of 0.005% and total dissolved solids (TDS) limit of 1500 mg/l.

Operational Limits & Requirements

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

Operating Limits

- A. The Total Dissolved Solids (TDS) level shall not exceed 1,500 mg/l for any single sampling event.
- B. The owner or operator shall test TDS on a monthly basis.

Reporting and Recordkeeping

All records as required by this permit shall be kept on-site for a minimum of five (5) years and shall be available for inspection by the DNR. Records shall be legible and maintained in an orderly manner.

- A. The owner or operator shall keep records of the results of the monthly TDS testing.

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, 7900 Hickman Rd, Suite #1, Windsor Heights, Iowa 50324, 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 Permits, 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 following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
 - a. Form 1.0 "Facility Identification";
 - b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
 - c. Form 5.0 "Title V annual emissions summary/fee"; and
 - d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
 - a. Form 1.0 "Facility Identification";
 - b. Form 5.0 "Title V annual emissions summary/fee";
 - c. Part 3 "Application certification."
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) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

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

2. Excess Emissions Reporting

a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:

- i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and expected duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps being taken to remedy the excess emission.
- vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department

within seven days of the onset of the upset condition, and shall include as a minimum the following:

- i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
- ii. The estimated quantity of the excess emission.
- iii. The time and duration of the excess emission.
- iv. The cause of the excess emission.
- v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
- vi. The steps that were taken to limit the excess emission.
- vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

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

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

G15. Permit Deviation Reporting Requirements

A deviation is any failure to meet a term, condition or applicable requirement in the permit. Reporting requirements for deviations that result in a hazardous release or excess emissions have been indicated above (see G13 and G14). Unless more frequent deviation reporting is specified in the permit, any other deviation shall be documented in the semi-annual monitoring report and the annual compliance certification (see G4 and G5). *567 IAC 22.108(5)"b"*

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

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of

performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

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

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

- a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
- b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
- c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
- d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
- e. The changes comply with all applicable requirements.
- f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
 - i. A brief description of the change within the permitted facility,
 - ii. The date on which the change will occur,
 - iii. Any change in emission as a result of that change,
 - iv. The pollutants emitted subject to the emissions trade
 - v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
 - vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
 - vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

2. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements. *567 IAC 22.110(2)*

3. Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). *567 IAC 22.110(3)*

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*
5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

- a. An administrative permit amendment is a permit revision that does any of the following:
 - i. Correct typographical errors
 - ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
 - iii. Require more frequent monitoring or reporting by the permittee; or
 - iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
- b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
- c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

- a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
 - i. Do not violate any applicable requirement;
 - ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
 - iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
 - iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
 - v. Are not modifications under any provision of Title I of the Act; and
 - vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

- b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
- i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
 - ii. The permittee's suggested draft permit;
 - iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
 - iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
- c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
 - b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
 - c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
 - d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
 - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
 - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
 - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air

conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,

5. The permittee shall be allowed to switch from any ozone-depleting substance 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
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(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:

Chief of Air Permits
U.S. EPA Region 7
Air Permits and Compliance Branch
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
7900 Hickman Road, Suite #1
Windsor Heights, IA 50324
(515) 725-9500

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

909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

Field Office 3

1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 5

7900 Hickman Road, Suite #200
Windsor Heights, IA 50324
(515) 725-0268

Polk County Public Works Dept.

Air Quality Division
5885 NE 14th St.
Des Moines, IA 50313
(515) 286-3351

Field Office 2

2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 4

1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 6

1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

Linn County Public Health

Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000

V. Appendix

- A. 40 CFR 60 Subpart A – General Provisions
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/a/ahp.html>
- B. 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/db/dbhp.html>
- C. 40 CFR 60 Subpart DD – Standards of Performance for Grain Elevators
<http://www.gpo.gov/fdsys/pkg/CFR-2011-title40-vol6/pdf/CFR-2011-title40-vol6-part60-subpartDD.pdf>
- D. 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
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/kb/kbhp.html>
- E. 40 CFR 60 Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63>
- F. 40 CFR 63 Subpart ZZZZ – National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
<http://www.gpo.gov/fdsys/pkg/FR-2013-01-30/pdf/2013-01288.pdf>