

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

**Name of Permitted Facility: POET Biorefining - Corning**  
**Facility Location: 1680 Brooks Road, Corning, IA 50841**  
**Air Quality Operating Permit Number: 14-TV-007**  
**Expiration Date: May 18, 2019**  
**Permit Renewal Application Deadline: November 18, 2018**

**EIQ Number: 92-6966**  
**Facility File Number: 02-05-001**

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**Responsible Official**

**Name: Greg Olsen**  
**Title: General Manager**  
**Mailing Address: 1680 Brooks Road, Corning, IA 50841**  
**Phone #: 641-322-6401**

**Permit Contact Person for the Facility**

**Name: Aleigh Beaman**  
**Title: EH&S Specialist**  
**Mailing Address: 1680 Brooks Road, Corning, IA 50841**  
**Phone #: 641-322-6413**

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

**For the Director of the Department of Natural Resources**

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Lori Hanson, Supervisor of Air Operating Permits Section

Date

# Table of Contents

<b>I. Facility Description and Equipment List .....</b>	<b>4</b>
<b>II. Plant - Wide Conditions.....</b>	<b>6</b>
<b>III. Emission Point Specific Conditions .....</b>	<b>10</b>
<b>IV. General Conditions.....</b>	<b>63</b>
G1. Duty to Comply	
G2. Permit Expiration	
G3. Certification Requirement for Title V Related Documents	
G4. Annual Compliance Certification	
G5. Semi-Annual Monitoring Report	
G6. Annual Fee	
G7. Inspection of Premises, Records, Equipment, Methods and Discharges	
G8. Duty to Provide Information	
G9. General Maintenance and Repair Duties	
G10. Recordkeeping Requirements for Compliance Monitoring	
G11. Evidence used in establishing that a violation has or is occurring.	
G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification	
G13. Hazardous Release	
G14. Excess Emissions and Excess Emissions Reporting Requirements	
G15. Permit Deviation Reporting Requirements	
G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations	
G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification	
G18. Duty to Modify a Title V Permit	
G19. Duty to Obtain Construction Permits	
G20. Asbestos	
G21. Open Burning	
G22. Acid Rain (Title IV) Emissions Allowances	
G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements	
G24. Permit Reopenings	
G25. Permit Shield	
G26. Severability	
G27. Property Rights	
G28. Transferability	
G29. Disclaimer	
G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification	
G31. Prevention of Air Pollution Emergency Episodes	
G32. Contacts List	
<b>V. Appendix A: Links to Standards .....</b>	<b>77</b>

## Abbreviations

acfm.....	actual cubic feet per minute
CFR.....	Code of Federal Regulation
CE .....	control equipment
CEM.....	continuous emission monitor
DDGS.....	distillers dried grains with solubles
°F .....	degrees Fahrenheit
EIQ.....	emissions inventory questionnaire
EP .....	emission point
EU .....	emission unit
gr./dscf .....	grains per dry standard cubic foot
IAC.....	Iowa Administrative Code
IDNR.....	Iowa Department of Natural Resources
kW.....	kilowatts
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 <sub>10</sub> .....	particulate matter ten microns or less in diameter
SO <sub>2</sub> .....	sulfur dioxide
NO <sub>x</sub> .....	nitrogen oxides
VOC .....	volatile organic compound
CO.....	carbon monoxide
HAP.....	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: POET Biorefining - Corning

Permit Number: 14-TV-007

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

## Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
SV1	EU1	Corn Receiving Pit	06-A-144
	EU2	Grain Handling	
	EU3	Grain Storage	
SV2	EU4	Corn Scalper, Conveyor, Surge Bin	06-A-145
SV3	EU5	Hammermill #1	06-A-146
SV4	EU6	Hammermill #2	06-A-147
SV5	EU7	Hammermill #3	06-A-148
SV6	EU8	Hammermill #4	06-A-149
SV7	EU9	Hammermill #5	06-A-150
SV8	EU10	Batch Fermenters and Beer Well	06-A-151-S2
	EU11	Distillation Process	
SV9	EU10	Batch Fermenters and Beer Well	06-A-152-S2
	EU11	Distillation Process	
	EU12	DDGS Dryer #1	
	EU13	DDGS Dryer #2	
	EU14	Centrifuge #1	
	EU15	Centrifuge #2	
	EU16	Centrifuge #3	
	EU17	Centrifuge #4	
SV22	EU14	Centrifuge #1	11-A-464
	EU15	Centrifuge #2	
	EU16	Centrifuge #3	
	EU17	Centrifuge #4	
SV10	EU19	DDGS Fluid Bed Cooler	06-A-153-S2
SV11	EU20	DDGS Storage Silo	06-A-154
SV12	EU21	DDGS Storage Silo Bypass	06-A-155
SV13	EU22	Boiler #1	06-A-156-S1
SV14	EU23	Boiler #2	06-A-157-S1
SV15	EUTK-001	190-Proof Ethanol Storage Tank	06-A-158-S1
SV16	EUTK-002	200-Proof Ethanol Storage Tank	06-A-159-S1
SV17	EUTK-003	200-Proof Ethanol Storage Tank	06-A-160-S2
SV18	EUTK-004	200-Proof Ethanol Storage Tank	06-A-161-S2

<b>Emission Point Number</b>	<b>Emission Unit Number</b>	<b>Emission Unit Description</b>	<b>DNR Construction Permit Number</b>
SV19	EUTK-005	Denaturant Storage Tank	06-A-162-S2
SV20	EU24	Diesel Generator	06-A-163
SV21	EU25	Truck and Rail Loadout	06-A-164-S2
FS1	FS1	Truck Traffic	06-A-165-S1
FS2	FS2	Cooling Tower	06-A-166-S1
FS3	FS3	Fugitive Emissions from Equipment Leaks	06-A-167-S2
FS4	FS4	Grain and DDGS Fugitives	N/A

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**Insignificant Activities Equipment List**

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<b>Insignificant Emission Unit Number</b>	<b>Insignificant Emission Unit Description</b>
EU26	Corn Oil Extraction System (2 centrifuges and 5 process tanks)
EU27	Corn Oil Storage Tanks (2), 30,000 gallons each (0.000305 psia)
FS5	Wet Cake Production

## II. Plant-Wide Conditions

Facility Name: POET Biorefining - Corning  
Permit Number: 14-TV-007

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

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### Permit Duration

The term of this permit is: 5 years  
Commencing on: May 19, 2014  
Ending on: May 18, 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.

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### Emission Limits

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

#### Pollutant: Single HAP

Emission Limit: 9.4 tons/yr (Plant-wide limit)

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1, and 06-A-163

#### Pollutant: Total HAP

Emission Limit: 24.4 tons/yr (Plant-wide limit)

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1, and 06-A-163

### 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. Plant-wide, record the HAP emissions (in tons) for each HAP and total HAPs per twelve-month rolling period.

Authority for Requirement: 567 IAC 22.108(3)

Opacity (visible emissions): 40% opacity

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

Sulfur Dioxide (SO<sub>2</sub>): 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"

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#### **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 SV8, EP SV9, EP SV13, EP SV14, EP SV15, EP SV16, EP SV17, EP SV18, EP SV19, EP SV 20, EP SV21, and EP FS3.

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 SV13 and EP SV14.

See Appendix for a link to the Standard.

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

#### **40 CFR 60 Subpart Kb Requirements**

This facility is subject to Standards of Performance for *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. The affected units are EP SV15, EP SV16, EP SV17, EP SV18, and EP SV19.

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 SV8, EP SV9, EP SV15, EP SV16, EP SV17, EP SV18, EP SV19, EP SV21, and EP FS3.

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 *Stationary Reciprocating Internal Combustion Engines (RICE NESHP)*. The affected unit is EP SV20.

See Appendix for a link to the Standard.

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

**40 CFR 63 Subpart BBBBBB Requirements**

This facility is subject to National Emission Standard for Hazardous Air Pollutants for *Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*. The affected units are EP SV21 and EP FS3.

See Appendix for the link to the Standard.

Applicable requirements are incorporated in the Emission Point Specific conditions.

Authority for Requirements: 40 CFR 63 Subpart BBBBBB  
567 IAC 23.1(4) "eb"

### III. Emission Point-Specific Conditions

Facility Name: POET Biorefining - Corning  
Permit Number: 14-TV-007

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#### **Emission Point ID Number: SV1**

##### Associated Equipment

Associated Emission Unit ID Numbers: EU1, EU2, EU3  
Emissions Control Equipment ID Number: CS1  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU1, EU1, EU3  
Emission Unit Description: 3 Receiving Pits via Truck and Rail (EU1), Elevator (EU2), 4 Grain Bins (EU3)

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% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-144  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 1.01 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-144

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.01 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-144  
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 pollution control equipment according to the manufacturer's specifications.
- B. The grain bins shall be filled only while under negative pressure and vented to the control equipment.

#### **Reporting & Record keeping**

*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 maintenance and inspections.

Authority for Requirement: DNR Construction Permit 06-A-144

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 105  
Stack Opening (inches, dia.): 36  
Exhaust Flow Rate (scfm): 23,450  
Exhaust Temperature (°F): Ambient  
Discharge Style: Vertical Restricted  
Authority for Requirement: DNR Construction Permit 06-A-144

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 – Particulate Matter (PM<sub>10</sub>)  
1st Stack Test to be Completed by – May 18, 2016  
Test Method - 40 CFR 51, Appendix M, 201A with 202  
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

1st Stack Test to be Completed by – May 18, 2016

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

40 CFR 51, Appendix M, Method 202

Authority for Requirement – 567 IAC 22.108(3)

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

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

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

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

*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: SV2**

### Associated Equipment

Associated Emission Unit ID Numbers: EU4  
Emissions Control Equipment ID Number: CS2  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU4  
Emission Unit Description: Corn Scalper, Conveyor, Surge Bin  
Raw Material/Fuel: Grain  
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% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-145  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.107 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-145

Pollutant: Particulate Matter (PM)

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

Authority for Requirement: DNR Construction Permit 06-A-145  
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 pollution control equipment according to the manufacturer's specifications.

**Reporting & Record keeping**

*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 maintenance and inspections.

Authority for Requirement: DNR Construction Permit 06-A-145

**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: SV3, SV4, SV5, SV6, SV7**

Associated Equipment

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity (tons/hr)	Control Equipment ID	Control Equipment Description
SV3	EU5	Hammermill #1	Grain	22	CS3	Baghouse
SV4	EU6	Hammermill #2			CS4	
SV5	EU7	Hammermill #3			CS5	
SV6	EU8	Hammermill #4			CS6	
SV7	EU9	Hammermill #5			CS7	

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit(s): 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 06-A-146, 06-A-147, 06-A-148, 06-A-149, 06-A-150  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.514 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-146, 06-A-147, 06-A-148, 06-A-149, 06-A-150

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.514 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 06-A-146, 06-A-147, 06-A-148, 06-A-149, 06-A-150  
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 pollution control equipment according to the manufacturer's specifications.

## **Reporting & Record keeping**

*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 maintenance and inspections.

Authority for Requirement: DNR Construction DNR Construction Permits 06-A-146, 06-A-147, 06-A-148, 06-A-149, 06-A-150

## **Emission Point Characteristics**

*The emission points 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: Vertical Restricted

Authority for Requirement: DNR Construction Permits DNR Construction Permits 06-A-146, 06-A-147, 06-A-148, 06-A-149, 06-A-150

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 – Particulate Matter (PM<sub>10</sub>)

1st Stack Test to be Completed by – May 18, 2016<sup>(1)</sup>

Test Method - 40 CFR 51, Appendix M, 201A with 202

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

1st Stack Test to be Completed by – May 18, 2016<sup>(1)</sup>

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

40 CFR 51, Appendix M, Method 202

Authority for Requirement – 567 IAC 22.108(3)

<sup>(1)</sup>The testing result from one hammermill may be used to demonstrate compliance for all hammermills at the facility.

*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

*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: SV8 (RTO Bypass Stack)

### Associated Equipment

Associated Emission Unit ID Numbers: EU10, EU11

Emissions Control Equipment ID Number: CS8

Emissions Control Equipment Description: Packed Bed Wet Scrubber

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EU	Emission Unit Description	Raw Material/ Fuel	Maximum Capacity
EU10	5 Batch Mash Fermenters	Corn Mash	245 tons mash/hr 730,000 gals (each)
	Beer Well	Beer	890,000 gal
EU11	Distillation Process: Evaporator, Strippers, Sieves, Rectifier	Beer	851 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% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-151-S2  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit(s): 0.20 lb/hr; 0.05 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-151-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.20 lb/hr; 0.05 tons/yr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-151-S2  
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)

Emission Limits: 24.60 lb/hr, 6.15 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-151-S2

Pollutant: Single HAP  
Emission Limits: 4.0 lb/hr, 1.0 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-151-S2

Pollutant: Total HAP  
Emission Limits: 4.0 lb/hr, 1.0 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-151-S2

### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. Maintain Scrubber (CS8) according to manufacturer specifications and maintenance schedule.
- B. Emissions from fermentation (EU10) and distillation units (EU11) may be bypassed around the thermal oxidizer (CS11) for a maximum of 500 hours per twelve month rolling period.
- C. The owner or operator shall follow the applicable standards of Subpart VVa, 40 CFR 60.480a through 60.489a.

#### **Reporting & Record keeping**

*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. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Scrubber (CS8).
- B. The owner or operator shall record the number of hours emissions from the fermentation (EU10) and distillation units (EU11) are bypassed around the thermal oxidizer (CS11) on a monthly basis. Calculate and record rolling 12-month totals.
- C. 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 06-A-151-S2

#### **NSPS and NESHAP Applicability**

POET Biorefining - Corning is subject to the requirements/conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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, POET Biorefining - Corning chooses 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.

Authority for Requirement: DNR Construction Permit 06-A-151-S2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 74  
Stack Opening (inches, dia.): 24  
Exhaust Flow Rate (scfm): 6,650  
Exhaust Temperature (°F): Ambient  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 06-A-151-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: SV9 (RTO Stack)**

Associated Equipment

Associated Emission Unit ID Numbers: EU10, EU11, EU12, EU13, EU14, EU15, EU16, EU17, EU18

EU	EU Description	Raw Material/ Fuel	Maximum Capacity	Control Equipment ID	Control Equipment Description
EU10	5 Batch Mash Fermenters	Corn Mash	245 tons/hr 730,000 gallons per fermenter	CS8	Packed Bed Wet Scrubber
	Beer Well	Beer	890,000 gallons		
EU11	Distillation Process: Evaporator, Strippers, 3 Sieves, Rectifier	Beer	851 gals/min		
EU12	DDGS Dryer #1	DDGS	23 tons/hr each dryer	CS9	Multi-cyclone
EU13	DDGS Dryer #2			CS10	
EU14	Centrifuge #1	Whole Stillage	62 tons/hr each centrifuge	CS11	Regenerative Thermal Oxidizer (RTO)
EU15	Centrifuge #2				
EU16	Centrifuge #3				
EU17	Centrifuge #4				
EU18	RTO	Natural Gas	30 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: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-152-S2

567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 6.5 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-152-S2

Pollutant: Particulate Matter (PM)  
Emission Limit: 6.5 lb/hr; 0.1 gr/dscf  
Authority for Requirement: DNR Construction Permit 06-A-152-S2  
567 IAC 23.4(7)

Pollutant: NO<sub>x</sub>  
Emission Limit: 11.22 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-152-S2

Pollutant: VOC  
Emission Limit: 6.11 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-152-S2

Pollutant: CO  
Emission Limit: 11.48 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-152-S2

Pollutant: Single HAP  
Emission Limit: 1.5 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-152-S2

Pollutant: Total HAP  
Emission Limit: 2.26 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-152-S2

### **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 a 3-hour average operating temperature of Regenerative Thermal Oxidizer (CS-11) no less than 50 degrees Fahrenheit below the average operating temperature of Regenerative Thermal Oxidizer (CS-11) recorded during the most recent performance test that demonstrated compliance with the emission limits.
- B. Regenerative Thermal Oxidizer (CS-11) shall be operated at all times the DDGS Dryer 1 (EU-12) and DDGS Dryer 2 (EU-13) are in operation.
- C. DDGS Dryers (EU-12, EU-13) and Regenerative Thermal Oxidizer (CS-11) shall combust only natural gas and/or process off gasses.
- D. Maintain control equipment according to manufacturer specifications and maintenance schedule.
- E. The owner or operator shall follow the applicable standard of Subpart VVa, 40 CFR 60.480a through 60.489a.

### **Reporting & 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 (degrees Fahrenheit) of Regenerative Thermal Oxidizer (CS-11) and record all three-hour periods (during actual operations) of the average operating temperature of Regenerative Thermal Oxidizer (CS-11).
- B. The owner or operator shall keep records of the frequency and amount of time the Regenerative Thermal Oxidizer (CS-11) malfunctions and record estimates of emissions during said malfunctions. All excess emission reporting shall be conducted in accordance with conditions 6 and 8 of Construction Permit 06-A-152-S2.
- C. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of all control equipment.
- 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 06-A-152-S2

### **NSPS and NESHAP Applicability**

POET Biorefining-Corning is subject to the requirements/conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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, POET Biorefining-Corning chooses to comply with the provisions of NSPS Subpart VVa, 40 CFR Part 6 §60.480a to satisfy the requirements of NSPS VV.

Authority for Requirement: DNR Construction Permit 06-A-152-S2

### **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): 75,000

Exhaust Temperature (°F): 320

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-151-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.

**Stack Testing:**

Pollutant – Particulate Matter (PM<sub>10</sub>)  
1st Stack Test to be Completed by – May 18, 2016  
Test Method - 40 CFR 51, Appendix M, 201A with 202  
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)  
1st Stack Test to be Completed by – May 18, 2016  
Test Method – 40 CFR 60, Appendix A, Method 5  
40 CFR 51, Appendix M, Method 202  
Authority for Requirement – 567 IAC 22.108(3)

Pollutant - VOC  
1st Stack Test to be Completed by – May 18, 2016  
Test Method - 40 CFR 60, Appendix A, Method 25A  
Authority for Requirement - 567 IAC 22.108(3)

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

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

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

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

*Facility operation and maintenance plans for CS8, CS9, and CS10 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: SV22 (RTO Bypass)

### Associated Equipment

Associated Emission Unit ID Numbers: EU14, EU15, EU16, EU17

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EU	EU Description	Raw Material/ Fuel	Maximum Capacity
EU14	Centrifuge #1	Whole Stillage	62 tons/hr each centrifuge
EU15	Centrifuge #2		
EU16	Centrifuge #3		
EU17	Centrifuge #4		

### Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 11-A-464  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)

Emission Limit: 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 11-A-464  
567 IAC 23.4(7)

Pollutant: VOC

Emission Limit: 1.90 lb/hr; 0.465 tons/yr

Authority for Requirement: DNR Construction Permit 11-A-464

#### Operational Limits & Requirements

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

#### **Operating Limits**

A. Emissions from Centrifuge No. 1 (EU14), Centrifuge No.2 (EU15), Centrifuge No. 3 (EU16), and Centrifuge No. 4 (EU17) may be bypassed around the thermal oxidizer (CS11)

for a maximum of 500 hours per twelve month rolling period.

**Reporting & Record keeping**

*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 the number of hours emissions from Centrifuge No. 1 (EU14), Centrifuge No.2 (EU15), Centrifuge No. 3 (EU16), and Centrifuge No. 4 (EU17) are bypassed around the thermal oxidizer (CS11) on a monthly basis. Calculate and record rolling 12-month totals.

Authority for Requirement: DNR Construction Permit 11-A-464

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 55

Stack Opening (inches, dia.): 18

Exhaust Flow Rate (scfm): 50

Exhaust Temperature (°F): 212

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 11-A-464

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: SV10**

### Associated Equipment

Associated Emission Unit ID Numbers: EU19  
Emissions Control Equipment ID Number: CS12  
Emissions Control Equipment Description: Baghouse

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Emission Unit vented through this Emission Point: EU19  
Emission Unit Description: 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: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-153-S2  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.0 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-153-S2

Pollutant: Particulate Matter (PM)

Emission Limit: 1.0 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-153-S2  
567 IAC 23.4(7)

Pollutant: VOC

Emission Limit: 6.70 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-153-S2

Pollutant: Single HAP

Emission Limit: 0.25 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-153-S2

Pollutant: Total HAP  
Emission Limit: 0.60 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-153-S2

**Operational Limits & Requirements**

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

**Operating Limits**

A. Maintain the Pulse Jet baghouse (CS-12) according to manufacturer specifications and maintenance schedules.

**Reporting & Record keeping:**

*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. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Pulse Jet Baghouse (CS-12).

Authority for Requirement: DNR Construction Permit 06-A-153-S2

**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): 21,300  
Exhaust Temperature (°F): 100  
Discharge Style: Vertical Obstructed  
Authority for Requirement: DNR Construction Permit 06-A-153-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: SV11, SV12

### Associated Equipment

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity (tons/hr)	Control Equipment ID	Control Equipment Description
SV11	EU20	DDGS Storage Silo	DDGS	23	CS13	Filter
SV12	EU21	DDGS Storage Silo Bypass			CS14	Receiver

### Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 06-A-154, 06-A-155  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.17 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-154, 06-A-155

Pollutant: Particulate Matter (PM)

Emission Limit: 0.17 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permits 06-A-154, 06-A-155  
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 pollution control equipment according to the manufacturer's specifications.

#### **Reporting & Record keeping**

*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 maintenance and inspections.

Authority for Requirement: DNR Construction Permits 06-A-154, 06-A-155

**Emission Point Characteristics**

*The emission points shall conform to the specifications listed below.*

	<b>SV11</b>	<b>SV12</b>
Stack Height (ft, from the ground)	114	30
Stack Opening (inches)	16 × 16	
Exhaust Flow Rate (acfm)	4,000	
Exhaust Temperature (°F)	Ambient	
Discharge Style	Vertical Obstructed	Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 06-A-154, 06-A-155

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: SV13, SV14**

Associated Equipment

EP	EU	EU Description	Raw Material/ Fuel	Rated Capacity (MMBtu/hr)	Monitoring Equipment ID	Monitoring Equipment Description
SV13	EU22	Boiler #1	Natural Gas	143 each	PEM1	NO <sub>x</sub> Monitor
SV14	EU23	Boiler #2			PEM2	

**Applicable Requirements**

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

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

Pollutant: Opacity

Emission Limit: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 1.07 lb/hr

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

Pollutant: Particulate Matter (PM)

Emission Limit: 1.07 lb/hr; 0.03 lb/MMBtu

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1  
567 IAC 23.1(2)"ccc"

Pollutant: SO<sub>2</sub>

Emission Limit: 0.08 lb/hr; 500 ppm

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1  
567 IAC 23.3(3)

Pollutant: NO<sub>x</sub>

Emission Limit: 4.99 lb/hr; 0.1 lb/MMBtu <sup>(2)</sup>

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1  
567 IAC 23.1(2)"ccc"

<sup>(2)</sup>This standard applies at all times including periods of startup, shutdown and malfunction. Compliance is determined on a 30-day rolling average basis.

Pollutant: VOC

Emission Limit: 0.77 lb/hr  
Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

Pollutant: CO  
Emission Limit: 5.00 lb/hr  
Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

Pollutant: Single HAP  
Emission Limit: 9.4 tpy<sup>(3)</sup>  
Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

Pollutant: Total HAP  
Emission Limit: 24.4 tpy<sup>(3)</sup>  
Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

<sup>(3)</sup> Plantwide limit, to be an area source for Title V.

### **Operational Limits & Requirements**

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

#### **Operating Limits**

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

#### **Reporting & Record keeping**

*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 60.49(i), with the following information:
  - a. Calendar date
  - b. Average hourly nitrogen oxides emissions (as NO<sub>2</sub>) rates measured or predicted.
  - c. 30-day average nitrogen oxides emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxides emission rates for the preceding 30 steam generating unit operating days .

- d. Identification of the steam generating unit operating days when the calculated 30-day average 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.
- e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- g. Identification of “F” factor used for calculations, method of determination, and type of fuel combusted.
- h. Identification of the times when the pollutant concentrations exceeded the full span of the continuous monitoring system.
- i. 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.
- j. Results of the daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR 60 Appendix F, Procedure 1.

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

#### **NSPS and NESHAP Applicability**

These units are subject to NSPS Subpart A, *General Requirements* and Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*.

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

#### **Emission Point Characteristics**

*The emission points 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 Permits 06-A-156-S1, 06-A-157-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.

**Continuous Emissions Monitoring:**

The owner or operator shall install, calibrate, maintain and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere. The CEM shall be operated and data collected as required under 40 CFR 60.48b(c), (d), (e) and (f), or use an approved alternative monitoring plan.

Authority for Requirement: DNR Construction Permits 06-A-156-S1, 06-A-157-S1

*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: SV15**

### Associated Equipment

Associated Emission Unit ID Numbers: EUTK-001  
Emissions Control Equipment ID Number: None  
Emissions Control Equipment Description: Internal Floating Roof

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

### **Applicable Requirements**

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

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

None at this time.

#### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. 190 Proof Ethanol Storage Tank (TK-001) is limited to store 190-proof ethanol only.
- B. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).

Authority for Requirement: DNR Construction Permit 06-A-158-S1

#### **Reporting & Record keeping**

*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 §60.115b(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 §60.11b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60 §60.116b(b), 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 Part 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 annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permit 06-A-158-S1

**NSPS and NESHAP Applicability**

This storage tank is subject to the requirements and conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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* as specified in 40 CFR Part 60 §60.110b(a).

Authority for Requirement: DNR Construction Permit 06-A-158-S1

This storage tank is also subject to the requirements and conditions 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).

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 35
- Stack Opening, (inches, dia.): 10
- Exhaust Flow Rate (scfm): Working/Breathing Loss
- Exhaust Temperature (°F): Ambient
- Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 06-A-158-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: SV16**

### Associated Equipment

Associated Emission Unit ID Numbers: EUTK-002

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

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Emission Unit vented through this Emission Point: EUTK-002

Emission Unit Description: 200-Proof Ethanol Storage Tank

Raw Material/Fuel: Ethanol

Rated Capacity: 250,000 gallons

### **Applicable Requirements**

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

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

None at this time.

#### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. Storage Tank (TK002) is limited to storing 200 proof ethanol only.
- B. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).

Authority for Requirement: DNR Construction Permit 06-A-159-S1

#### **Reporting & Record keeping**

*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 §60.115b(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 §60.11b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60 §60.116b(b), 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 Part 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 annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permit 06-A-159-S1

**NSPS and NESHAP Applicability**

This storage tank is subject to the requirements and conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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* as specified in 40 CFR Part 60 §60.110b(a).

Authority for Requirement: DNR Construction Permit 06-A-159-S1

This storage tank is also subject to the requirements and conditions 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).

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 35
- Stack Opening, (inches, dia.): 10
- Exhaust Flow Rate (scfm): Working/Breathing Loss
- Exhaust Temperature (°F): Ambient
- Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 06-A-159-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: SV17, SV18**

### Associated Equipment

Associated Emission Unit ID Numbers: EUTK003, EUTK004  
Emissions Control Equipment ID Number: None  
Emissions Control Equipment Description: Internal Floating Roof

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Emission Unit vented through this Emission Point: EUTK003, EUTK004  
Emission Unit Description: 200-Proof Ethanol Storage Tank  
Raw Material/Fuel: Ethanol  
Rated Capacity: 2,000,000 gallons (each)

### **Applicable Requirements**

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

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

None at this time.

#### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. 190 Proof Ethanol Storage Tank (TK-001) is limited to store 190-proof ethanol only.
- B. Storage Tanks (TK002, TK003 and TK-004) are limited to store 200-proof ethanol only.
- C. Denaturant Storage Tank (TK-005) shall be used for the storage of denaturant only.
- D. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).

Authority for Requirement: DNR Construction Permits 06-A-160-S2, 06-A-161-S2

#### **Reporting & Record keeping**

*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 §60.115b(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 §60.11b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60 §60.116b(b), 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 Part 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 annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permits 06-A-160- S2,06-A-161-S2

**NSPS and NESHAP Applicability**

These storage tanks are subject to the requirements and conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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 as specified in 40 CFR Part 60 §60.110b(a).

Authority for Requirement: DNR Construction Permits 06-A-160-S2, 06-A-161-S2

These storage tanks are also subject to the requirements and conditions 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).

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

**Emission Point Characteristics**

*The emission points shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 51
- Stack Opening, (inches, dia.): 10
- Exhaust Flow Rate (scfm): Working/Breathing Loss
- Exhaust Temperature (°F): Ambient
- Discharge Style: Downward

Authority for Requirement: DNR Construction Permits 06-A-160-S2, 06-A-161-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: SV19**

### Associated Equipment

Associated Emission Unit ID Numbers: EUTK005

Emissions Control Equipment ID Number: None

Emissions Control Equipment Description: Internal Floating Roof

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Emission Unit vented through this Emission Point: EUTK005

Emission Unit Description: Denaturant Storage Tank

Raw Material/Fuel: Denaturant

Rated Capacity: 126,900 gallons

### **Applicable Requirements**

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

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

None at this time.

#### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. Denaturant Storage Tank (TK-005) shall be used for the storage of denaturant only.
- B. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).
- C. The owner or operator shall follow the applicable requirements of Subpart BBBBBB, 40 CFR 63.11080 through 63.11100.

Authority for Requirement: DNR Construction Permit 06-A-162-S2

#### **Reporting & Record keeping**

*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 §60.115b(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 §60.11b(b) for the life of the source.
- C. Record as specified in 40 CFR Part 60 §60.116b(b), 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 Part 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 annually, the net material throughput in gallons.
- F. The owner or operator shall follow the monitoring, notification and recordkeeping standards of Subpart BBBBBB, 40 CFR 63.11092 through 63.11095, as applicable.

Authority for Requirement: DNR Construction Permit 06-A-162-S2

### **NSPS and NESHAP Applicability**

This storage tank is subject to the requirements and conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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 as specified in 40 CFR Part 60 §60.110b(a).

Authority for Requirement: DNR Construction Permit 06-A-162-S2

This storage tank is also subject to the requirements and conditions 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).

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

### **Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

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

Stack Opening, (inches, dia.): 10

Exhaust Flow Rate (scfm): Working/Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: Downward

Authority for Requirement: DNR Construction Permit 06-A-162-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: SV20**

### Associated Equipment

Associated Emission Unit ID Numbers: EU24

Emissions Control Equipment ID Number: CS15

Emissions Control Equipment Description: Oxidation Catalyst System

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Emission Unit vented through this Emission Point: EU24

Emission Unit Description: Diesel Generator

Raw Material/Fuel: Diesel

Rated Capacity: 2,000 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: 40% <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-163  
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM<sub>10</sub>)

Emission Limit: 0.44 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-163

Pollutant: Particulate Matter (PM)

Emission Limit: 0.44 lb/hr; 0.1 gr/dscf

Authority for Requirement: DNR Construction Permit 06-A-163  
567 IAC 23.3(2)"a"

Pollutant: SO<sub>2</sub>

Emission Limit: 10.72 lb/hr; 2.5 lb/MMBtu

Authority for Requirement: DNR Construction Permit 06-A-163  
567 IAC 23.3(3)"b"

Pollutant: NO<sub>x</sub>

Emission Limit: 47 lb/hr

Authority for Requirement: DNR Construction Permit 06-A-163

Pollutant: VOC  
Emission Limit: 1.18 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-163

Pollutant: CO  
Emission Limit: 0.53 lb/hr  
Authority for Requirement: DNR Construction Permit 06-A-163

Pollutant: Single HAP  
Emission Limit: 9.4 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-163

Pollutant: Total HAP  
Emission Limit: 24.4 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-163

### **Operational Limits & Requirements**

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

#### **Operating Limits**

- A. This generator shall be fired by fuel oil #1 or #2 only.
- B. The sulfur content of any fuel oil used in this generator shall not exceed 0.5% by weight.
- C. This generator shall be operated a maximum of 100 hours per 12 month rolling period for peak shaving and an additional 100 hours per 12 month rolling period for emergency operation.

#### **Reporting & Record keeping**

*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 the sulfur content of any fuel oil used in this generator, in weight percent.
- B. Record the number of hours this generator is operated. Calculate and record monthly and 12 month rolling totals for peak shaving and emergency use.

Authority for Requirement: DNR Construction Permit 06-A-163

#### **NSPS and NESHAP Applicability**

##### **NESHAP:**

The non-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 non-emergency engine, located an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date<sup>(1)</sup>:

According to 40 CFR 63.6595(a)(1), you must comply with the applicable provisions of Subpart ZZZZ no later than May 3, 2013.

Emission Standards<sup>(2)</sup>:

According to 40 CFR 63.6603(a) and Table 2d, you must comply with the following emission standards:

1. Limit concentration of CO to 23 ppmvd or less at 15 percent O<sub>2</sub>; or
2. Reduce CO emissions by 70 percent or more.

Operating Limits<sup>(2)</sup>:

According to 40 CFR 63.6603(a) and Table 2b, you must comply with the following operating limits if you use an oxidation catalyst system:

1. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
2. Maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

Fuel Requirements:

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(a).

Testing and Compliance Requirements:

1. According to 40 CFR 63.6612(a), you must conduct the initial performance tests or other applicable initial compliance demonstrations in Tables 4 and 5 to subpart ZZZZ no later than 180 days after the compliance date (or October 30, 2013).
2. You must demonstrate initial compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6630(a), (b), and (c).
3. According to 40 CFR 63.6615 and Table 3 to subpart ZZZZ, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first.
4. You must conduct the performance testing in accordance with 40 CFR 63.6620 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 60 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing.
5. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of subpart ZZZZ, you must install, operate, and maintain the CPMS according to the requirements in 40 CFR 63.6625(b).
6. If your engine is not equipped with a closed crankcase ventilation system, you must comply with requirements in 40 CFR 63.6625(g) for operating and maintaining the engine's crankcase ventilation system<sup>(2)</sup>.
7. According to 40 CFR 63.6625(h) and Table 2d, you must 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, after which time the non-startup emission standards apply.

8. You must demonstrate continuous compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR 63.6605, 6635, and 6640(a), (b), and (e).

Notification, Reporting, and Recordkeeping Requirements

1. You must comply with the applicable notification requirements in pursuant to 40 CFR 63.6645(a), (g), (h), and (i).
2. You must comply with the applicable reporting requirements in pursuant to 40 CFR 63.6650(a) to (f).
3. You must comply with the applicable recordkeeping requirements in pursuant to 40 CFR 63.6655(a), (b), and (d), and 40 CFR 63.6660, including keeping records for at least 5 years.

<sup>(1)</sup> In accordance with 40 CFR 63.6603(e), if your engine is certified to the Tier 3 (Tier 2 for engines > 560 kW) emission standards in Table 1 of 40 CFR 89.112, you may comply with the requirements under Part 63 by meeting the requirements for Tier 3 engines (Tier 2 for engines > 560 kW) in 40 CFR Part 60 Subpart III.

<sup>(2)</sup> See 40 CFR 63.6603(d) for alternative standards for certain certified Tier 1 and Tier 2 engines that are required to be replaced no later than June 1, 2018. However, you must submit a notification by March 3, 2013 in accordance with 40 CFR 63.6645(i).

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

NSPS

This non-emergency engine is also subject to 40 CFR 60 Subpart III – Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines*.

Emission Standards:

According to 40 CFR 60.4204(a), you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Engine Displacement (liters/cylinder)	Maximum Engine Power	NMHC + NOx	HC	NOx	CO	PM	Rule Reference
Disp. < 10	130 ≤ kW (175 ≤ HP)	-	1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)	Table 1 to Subpart III

Fuel Requirements:

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 80.510(b).

Compliance Requirements:

1. If your engine is equipped with a diesel particulate filter (DPF) to comply with the emission standards, the DPF must be installed with a backpressure monitor that notifies you when the high backpressure limit of the engine is approached. 40 CFR 60.4209(b).
2. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
3. You must demonstrate compliance with the applicable emission standards according to one of the following methods. 40 CFR 60.4211(b).
  - a) Purchasing an engine certified according to 40 CFR 89 or 40 CFR 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
  - b) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Subpart IIII and these methods must have been followed correctly.
  - c) Keeping records of engine manufacturer data indicating compliance with the standards.
  - d) Keeping records of control device vendor data indicating compliance with the standards.
  - e) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR 60.4212, as applicable.
4. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 4211(g) for additional information.

5.

Maximum Engine Power	Initial Test	Subsequent Test
500 < HP	Within 1 year of engine startup, or non-permitted action <sup>(1)</sup>	Every 8,760 hours or 3 years, whichever comes first

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

**Notification and Recordkeeping Requirements**

1. If your non-emergency engine is greater than 2,237 KW (3,000 HP), or has a displacement of greater than or equal to 10 liters per cylinder, or is a pre-2007 model year engine that is greater than 130 KW (175 HP) and not certified, you must meet the notification and recordkeeping requirements in 40 CFR 60.4214(a).
2. If your engine is equipped with a diesel particulate filter (DPF), you must keep records of any corrective action taken after the backpressure monitor has notified you that the high backpressure limit of the engine is approached. 40 CFR 60.4214(c).

Authority for Requirement: 40 CFR Part 60 Subpart III  
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.): 8  
 Exhaust Flow Rate (acfm): 15,471  
 Exhaust Temperature (°F): 806  
 Discharge Style: Vertical Unobstructed  
 Authority for Requirement: DNR Construction Permit 06-A-163

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: SV21**

### Associated Equipment

Associated Emission Unit ID Numbers: EU25  
Emissions Control Equipment ID Number: Flare  
Emissions Control Equipment Description: Flare (Truck only)

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Emission Unit vented through this Emission Point: EU25  
Emission Unit Description: Truck and Rail Loadout  
Raw Material/Fuel: Denatured Ethanol  
Rated Capacity: 500 gal/min (Truck), 2,400 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: 40% <sup>(1)</sup>  
Authority for Requirement: DNR Construction Permit 06-A-164-S2  
567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: PM  
Emission Limit: 0.1 gr/dscf  
Authority for Requirement: DNR Construction Permit 06-A-164-S2  
567 IAC 23.3(2)"a"

Pollutant: NO<sub>x</sub>  
Emission Limit: 1.32 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-164-S2

Pollutant: VOC  
Emission Limit: 21.73 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-164-S2

Pollutant: CO  
Emission Limit: 3.24 tons/yr  
Authority for Requirement: DNR Construction Permit 06-A-164-S2

Pollutant: Total HAP

Emission Limit: 1.26 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-164-S2

### **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 loadout a maximum of 77.5 million gallons of denatured ethanol (up to 30% denaturant) per twelve month rolling period on a plant-wide basis.
- B. The owner or operator shall loadout a maximum of 7.75 million gallons of E-70 (ethanol blended with between 15 and 30% denaturant) per twelve month rolling period on a plant-wide basis.
- C. All truck loadouts shall be controlled by a flare.
- D. The flare shall be designed and operated according to the provisions of 40 CFR 60.18, including a device to determine the presence of the pilot flame.
- E. The owner or operator shall follow the requirements of Subpart BBBBBB, 40 CFR 63.11080 through 63.11100, as applicable when loading E-70.

#### **Reporting & Record keeping**

*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 the amount of denatured ethanol and the amount of E-70 loadout on a plant-wide basis in gallons, and update the twelve month rolling total for each on a monthly basis in gallons.
- B. The owner or operator shall monitor the presence of the pilot flame and other flame parameters according to the provisions of 40 CFR 60.18.
- C. The owner or operator shall follow the monitoring, notification and recordkeeping standards of Subpart BBBBBB, 40 CFR 63.11092 through 63.11095, as applicable .

Authority for Requirement: DNR Construction Permit 06-A-164-S2

### **NSPS and NESHAP Applicability**

The equipment components in vapor or liquid gasoline service (includes E-70) that meet the criteria in Tables 1 through 3 of the subpart is subject to the NESHAP, Subpart BBBBBB, *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities.*

This facility is subject to the requirements and conditions of NESHAP Subpart A-*General Provisions* as specified in 40 CFR Part 63 §63.11098 (Table 3).

Authority for Requirement: DNR Construction Permit 06-A-164-S2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 20  
Stack Opening (inches, dia.): 9  
Exhaust Flow Rate (scfm): 100  
Exhaust Temperature (°F): 1,500  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 06-A-164-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: FS1**

### Associated Equipment

Associated Emission Unit ID Numbers: FS1

Emissions Control Measure Description: Dust Suppression / Partly Paved Roads

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Emission Unit vented through this Emission Point: FS1

Emission Unit Description: Haul Roads

Raw Material/Fuel: Truck Traffic

Rated Capacity: 31 VMT/hr (estimated)

### **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: PM

Emission Limit: 17.17 tons/yr <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-165-S1

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

#### **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 keep records of the number of trucks (both all trucks, and a subtotal of the amount of truck denaturant and truck ethanol loadout) that arrive on a monthly basis.
- B. The owner or operator shall test both a representative paved road and a representative unpaved road for silt content once a month, prior to the application of any dust controls (such as dust suppressant or watering).
- C. The owner or operator shall apply chemical dust suppressants on unpaved roads at the rate and frequency required by the manufacturer's specifications to achieve a minimum of 65% fugitive dust control. Chemical suppressants shall be applied a minimum of once per month. If the selected chemical dust suppressant cannot be applied because the ambient air temperature (measured at the facility during daylight operating hours) will be less than 35 degrees F, or else weather conditions in combination with the dust suppression application could create hazardous driving conditions, then the chemical dust suppression application shall be postponed and applied as soon as the conditions preventing the application have abated.
- D. If a dust suppression method, such as watering, is used on the paved road portion of the plant,

the owner or operator shall document the procedures used and frequency and amount of application, and record each application.

**Reporting & Record keeping**

*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 dust suppressant application (date, location of suppressant application, and amount) along with documentation when environmental conditions meant the dust suppressant could not be applied as planned. The owner or operator shall also keep a copy of the manufacturer’s specifications for achieving 65% dust suppression available for inspection.
- B. The owner or operator shall update monthly the twelve month rolling total PM emissions by adding up the calculated monthly emissions for the previous twelve months (for both paved and unpaved road emissions), and immediately notify the DNR if the twelve month rolling total exceeds 17.17 tons.
- C. 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, an average of 0.33 miles on unpaved roads per denaturant truck delivery or ethanol haul out, and a 65% dust suppression on the unpaved portions of the plant:

$$E_1 = V * 0.000557 * (s/12)^{0.7},$$

Where  $E_1$  = tons PM/month due to unpaved road traffic  
 $V$  = number of trucks travelling on unpaved roads that month, and  
 $s$  = silt content in % from that month’s test results on unpaved roads  
(i.e., an 8% silt content would be  $s = 8$ ).

- 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 13.2.1, the PM empirical constants, and assumes a mean vehicle weight of 27.5 tons and an average of 0.70 miles on paved roads per truck.

$$E_2 = 0.7 * V * [2.276 * (s/2)^{0.65} - 0.00047] / 2000,$$

Where  $E_2$  = tons PM/month due to paved road traffic  
 $V$  = number of trucks that month, and  
 $s$  = silt content in % from that month’s paved test results (i.e., an 8% silt content would be  $s = 8$ ).

Authority for Requirement: DNR Construction Permit 06-A-165-S1

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: FS2**

### Associated Equipment

Associated Emission Unit ID Numbers: FS2

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Emission Unit vented through this Emission Point: FS2

Emission Unit Description: Cooling Tower

Raw Material/Fuel: Water

Rated Capacity: 1,275 kgal/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: 40%

Authority for Requirement: DNR Construction Permit 06-A-166-S1

Pollutant: PM<sub>10</sub>

Emission Limit: 3.49 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-166-S1

Pollutant: PM

Emission Limit: 3.49 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-166-S1

#### **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 1500 mg/l for any single sampling event.
- B. The owner or operator shall test for TDS on a monthly basis.

#### **Reporting & Record keeping**

*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 monthly TDS testing

Authority for Requirement: DNR Construction Permit 06-A-166-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height (ft, from the ground): 31  
Stack Opening (inches, dia.): 37  
Exhaust Flow Rate (acfm): 600,000  
Exhaust Temperature (°F): 70  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: DNR Construction Permit 06-A-166-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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: FS3 (Plant-wide)**

### Associated Equipment

Associated Emission Unit ID Number: FS3

Emissions Control Measure Description: Leak Detection and Repair (LDAR)

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Emission Unit vented through this Emission Point: FS3

Emission Unit Description: Fugitive Emissions from Equipment Leaks

Raw Material/Fuel: Fugitive 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: VOC

Emission Limit: 5.03 tons/yr <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-167-S2

Pollutant: Total HAP

Emission Limit: 1.60 tons/yr <sup>(1)</sup>

Authority for Requirement: DNR Construction Permit 06-A-167-S2

<sup>(1)</sup> Limit established to restrict potential emissions. This is a plant-wide equipment leak limit with compliance demonstration specified below.

#### **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. The component count shall be updated as the component count varies.
- B. The owner or operator shall follow the applicable standards of NSPS Subpart VVa, 40 CFR 60.480a through 40 CFR 60.489a.
- C. The owner or operator shall follow the applicable requirements of Subpart BBBBBB, 40 CFR 63.11080 through 63.11100.

**Reporting & Record keeping**

*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 in Tons 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.
- C. The owner or operator shall follow the monitoring, notification and recordkeeping standards of Subpart BBBBBB, 40 CFR 63.11092 through 63.11095, as applicable.

Authority for Requirement: DNR Construction Permit 06-A-167-S2

**NSPS and NESHAP Applicability**

POET Biorefining-Corning is subject to the requirements and conditions of New Source Performance Standards (NSPS) Subpart A-*General Provisions* and 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, POET Biorefining-Corning chooses to comply with the provisions of NSPS Subpart VVa, 40 CFR Part 60 §60.480a to satisfy the requirements of NSPS VV.

The equipment components in vapor or liquid gasoline service (includes E-70) that meet the criteria in Tables 1 through 3 of the subpart is subject to the NESHAP, Subpart BBBBBB, National Emission Standards for Hazardous Air Pollutants for *Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities*. POET Biorefining-Corning is subject to the requirements and conditions of NESHAP Subpart A-*General Provisions* as specified in 40 CFR Part 63 §63.11098 (Table 3).

Authority for Requirement: DNR Construction Permit 06-A-167-S2

**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: FS4**

Associated Equipment

Associated Emission Unit ID Numbers: FS4

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Emission Unit vented through this Emission Point: FS4  
Emission Unit Description: Grain Handling Fugitives  
Raw Material/Fuel: Grain and DDGS  
Rated Capacity: 840 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: Fugitive Dust

Emission Limit: No person shall allow, cause or permit 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, without taking reasonable precautions to prevent a nuisance. All persons 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.

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

**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 2**

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

**Field Office 3**

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

**Field Office 4**

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

**Field Office 5**

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

**Field Office 6**

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

**Polk County Public Works Dept.**

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

**Linn County Public Health**

Air Quality Branch  
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. Subpart Db – Standards of Performance for *Industrial – Commercial - Institutional Steam Generating Units*.  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;sid=032e902341db8873af7fe153511e9f67;rgn=div6;view=text;node=40%3A70.1.1.1.11;idno=40;cc=ecfr>
- C. 40 CFR 60 Subpart Kb – Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.  
<http://www.tceq.texas.gov/permitting/air/rules/federal/60/kb/kbhp.html>
- D. 40 CFR 60 Subpart VVa – Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006*.  
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&SID=bc4c913cc779deb441f61b794bf739ec&r=SUBPART&n=40y7.0.1.1.1.63>
- E. 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>
- F. 40 CFR 63 Subpart BBBB – National Emission Standard for Hazardous Air Pollutants for *Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*.  
<http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr;rgn=div6;view=text;node=40%3A15.0.1.1.1.15;idno=40;sid=62df1232dc085efd1ee45c5a3ef05df8;cc=ecfr>