

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

Name of Permitted Facility: Golden Grain Energy, LLC

Facility Location: 1822 43rd Street SW

Mason City, IA 50401

Air Quality Operating Permit Number: 09-TV-002R1

Expiration Date: March 5, 2022

Permit Renewal Application Deadline: September 5, 2021

EIQ Number: 92-6927

Facility File Number: 17-01-100

Responsible Official

Name: Chad Kuhlers

Title: Plant Manager

Mailing Address: 1822 43rd Street SW, Mason City, IA 50401

Phone #: (641)423-8525

Permit Contact Person for the Facility

Name: Chad Kuhlers

Title: Plant Manager

Mailing Address: 1822 43rd Street SW, Mason City, IA 50401

Phone #: (641)423-8525

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

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

Table of Contents

I. Facility Description and Equipment List	4
II. Plant - Wide Conditions.....	6
III. Emission Point Specific Conditions	10
IV. General Conditions.....	90
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	
V. Appendix A...Links to Standards	104
VI. Appendix B...Administrative Consent Order No. 2015-AQ-06.....	105

Abbreviations

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

Pollutants

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

I. Facility Description and Equipment List

Facility Name: Golden Grain Energy LLC

Permit Number: 09-TV-002R1

Facility Description: Denatured Ethanol Plant (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	IDNR Construction Permit Number
EP S10a	EU 1, EU 2, EU P50, EU B10	DDGS Dryers 1 and 2, Distillation Equipment (3 Tanks & Condenser), Heat Recovery Boiler	03-A-600-P5
EP S10b	EU3, EU 4, EU P, EU B	DDGS Dryers 3 and 4, Distillation Equipment (3 Tanks & Condenser), Heat Recovery Boiler	05-A-780-P3
EP S15	EU P15	Grain Unloading, Handling, and Storage	03-A-601P-S4
EP S30a	EU P30	Hammermill	03-A-602P-S2
EP S30b	EU P30b	Hammermill	05-A-781P
EP S35	EU P35a, EU P35b, EU P35c	2 Hammermills, 1 Surge Bin	12-A-289
EP S40a	EU P40a	Fermentation	03-A-603-P5
EP S40b	EU P40b	Fermentation	05-A-782-P3
EP S40c	EU P40c	Fermentation	12-A-119-S2
EP S70a	EU P70a	DDGS Cooler Cyclone	03-A-604P-S4
EP S70b	EU P70b	DDGS Cooler Cyclone	05-A-783P-S2
EP P80a	EU P80a	Cooling Tower	06-A-054P
EP P80b	EU P80b	Cooling Tower	05-A-784P
EP 80c	EU P80c	Cooling Tower	15-A-461
EP 80d	EU P80d	Cooling Tower	15-A-462-S1
EP S90	EU P90	DDGS Loading	03-A-605P-S2
EP 22	EU 22, EU 122	Truck and Rail Loadout	03-A-607-P6
EP 22b	EU 22b, EU 122b, EU 222b	Rail Loadout	08-A-235-P3
EP 25	EU 25	Emergency Fire Pump	06-A-056P
EP 26	EU 26	Emergency Fire Pump	07-A-1291
EP F90	EU F90	VOC Emissions from Equipment Leaks	05-A-384P-S1
EP F100	EU F100	Plant Haul Road	06-A-055P
EP T60A	EU T60A	Final Product Storage Tank	07-A-438P-S1
EP T60B	EU T60B	Final Product Storage Tank	07-A-439P-S1
EP T61	EU T61	Final Product Storage Tank	03-A-608P-S3
EP T62	EU T62	Final Product Storage Tank	03-A-609P-S3
EP T63	EU T63	200 Proof Ethanol Storage Tank	03-A-610P-S2
EP T64	EU T64	Denaturant Storage Tank	03-A-611P-S2
EP T65	EU T65	190 Proof Ethanol Storage Tank	03-A-612P-S2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
TCO	Tricanter Corn Oil Recovery System
CIT	Corrosion Inhibitor Tank (2000 gallons)
OB	Office Boiler (0.105 MMBtu/hr)
DFT1	Diesel Fuel Tank 1 (180 gallons)
DFT2	Diesel Fuel Tank 2 (180 gallons)
DFT3	Diesel Fuel Tank 3 (500 gallons)
GT	Gasoline Tank (100 gallons)
COT1	Corn Oil Tank 1 (30,000 gallons)
COT2	Corn Oil Tank 2 (30,000 gallons)
COT3	Corn Oil Tank 3 (30,000 gallons)
COL	Corn Oil Loadout

II. Plant-Wide Conditions

Facility Name: Golden Grain Energy LLC
Permit Number: 09-TV-002R1

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

Permit Duration

The term of this permit is: Five years from permit issuance
Commencing on: March 6, 2017
Ending on: March 5, 2022

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

Emission Limits

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

Single Hazardous Air Pollutant (Single HAP): 9.4 ton/yr (Plant-wide Limit)

Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2, 03-A-606P2, 05-A-384P-S1, 07-A-438P-S1, 07-A-439P-S1, 03-A-608P-S3, 03-A-609P-S3

Total Hazardous Air Pollutant (Total HAP): 24.4 ton/yr (Plant-wide Limit)

Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2, 03-A-606P2, 05-A-384P-S1, 07-A-438P-S1, 07-A-439P-S1, 03-A-608P-S3, 03-A-609P-S3

Opacity (visible emissions): 40% opacity

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

Sulfur Dioxide (SO₂): 500 parts per million by volume

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

Particulate Matter:

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

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizer or limestone.
4. Covering, at all times when in motion, open-bodied vehicles transporting materials likely to give rise to airborne dusts.
5. Prompt removal of earth or other material from paved streets or to which earth or other material has been transported by trucking or earth-moving equipment, erosion by water or other means.
6. Reducing the speed of vehicles traveling over on-property surfaces as necessary to minimize the generation of airborne dusts.

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

Operational Limits & Requirements

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

Terms and Conditions: The Permittee shall comply with all applicable requirements (including the following) of Iowa Department of Natural Resources *Administrative Consent Order No. 2015-AQ-06*.

- A. Golden Grain shall comply with the provisions of its air quality construction permits and Title V operating permit In the future.
- B. Golden Grain shall maintain and operate its process equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions.
- C. Within 90 days of the date of this order, Golden Grain shall create and submit to DNR Air Quality Bureau for approval a maintenance plan as described in 567 IAC 24.2(2), which shall include: (1) a written plan that tracks all applicable air quality requirements and deadlines to avoid future noncompliance, and (2) a specific written plan to ensure that EP S10a and EP S10b maintain compliance with permitted emission limits.

See Appendix B for the full text of the Administrative Consent Order.

Authority for Requirement: DNR Administrative Consent Order 2015-AQ-06

40 CFR 60 Subpart A Requirements

This facility is an affected source and these *General Provisions* apply to the facility. The affected units are EU 1, EU 2, EU P50, EU 10B, EU 3, EU 4, EU P, EU B, EU 26, EU T60a, EU T60b, EU T61, EU T62, EU T63, EU T64, EU T65, and EU F90.

See Appendix for a link to the Standard.

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

40 CFR 60 Subpart Db Requirements

This facility is subject to Standards of Performance for *Industrial-Commercial-Institutional Steam Generating Units*. The affected units are EU 10B and EU B.

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 the 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 storages tanks EU T60a, EU T60b, EU T61, EU T62, EU T63, EU T64, and EU T65.

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 VV Requirements

The facility is subject to Standards of Performance for *Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* for Which Construction, Reconstruction or Modification Commenced After January 5, 1981, and on or Before November 7, 2006 (40 CFR 60.480 through 40 CFR 60.489). The affected units are equipment in VOC service and any applicable devices and systems (as defined in 40 CFR 60.481) in the entire facility. The owner or operator shall comply with the applicable requirements in 40 CFR 60.480 through 60.489, including recordkeeping requirements in 40 CFR 60.486 and reporting requirements in 40 CFR 60.487.

See Appendix for a link to the Standard.

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

40 CFR 60 Subpart IIII Requirements

This facility is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The affected unit is EU 26.

See Appendix for a link to the Standard.

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

40 CFR 63 Subpart A Requirements

This facility is an affected source and these *General Provisions* apply to the facility. The affected units are EU 25 and EU 26.

See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR 63 Subpart A
567 IAC 23.1(4)

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to the Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines*. The affected units are EU 25 and EU 26.

See Appendix for a link to the Standard.

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

III. Emission Point-Specific Conditions

Facility Name: Golden Grain Energy LLC

Permit Number: 09-TV-002R1

Emission Point ID Numbers: EP S10a and EP S10b

Associated Equipment

Associated Emission Unit ID Numbers: EU 1, EU 2, EU P50, EU 10B*, EU3, EU4, EU P, and EU B

Emissions Control Equipment ID Numbers: CE 10a, CE 10b

Emissions Control Equipment Description: Thermal Oxidizers with Low-NO_x burners and Flue Gas Recirculation (125 MMBtu/hr)

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity
EP S10a	EU 1	DDGS Dryer 1	Beer, Unfermented Corn Solids, Whole Stillage, DDGS, Natural Gas	42 MMBtu/hr
	EU 2	DDGS Dryer 2		42 MMBtu/hr
	EU P50	Distillation Equipment (3 Tanks and Condenser)		NA
	EU 10B	Heat Recovery Boiler		125 MMBtu/hr
EP S10b	EU 3	DDGS Dryer 3		42 MMBtu/hr
	EU4	DDGS Dryer 4		42 MMBtu/hr
	EU P	Distillation Equipment (3 Tanks and Condenser)		NA
	EU B	Heat Recovery Boiler		125 MMBtu/hr

* Construction permit # 03-A-600-P5 for EP S10a incorrectly states that the EU number for this unit is 122.

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

BACT Emission Limits

Pollutant: Opacity

Emission Limit(s): 0%

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 4.5 lb/hr; 0.01 gr/dscf

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 4.5 lb/hr; 0.01 gr/scf

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 11.13 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Nitrogen Oxides (NO_x) (30-day rolling average)

Emission Limit(s): 73.23 tons/yr; 0.080 lb/MMBtu

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 2.75 lb/hr; 98% reduction or 10 ppmv⁽¹⁾

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

⁽¹⁾ VOC reduction to be determined with inlet/outlet testing using 40 CFR 60, Appendix A, Method 25A and VOC ppm_v limit to be expressed in ppm_v, dry, as propane.

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 25.46 lb/hr; 90% reduction or 100 ppmv

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Other Emission Limits

Pollutant: Particulate Matter (PM) - State

Emission Limit(s): 0.1 gr/scf

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppm

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 0.10 lb/MMBtu

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3
567 IAC 23.1(2)"ccc"
40 CFR 60.44b(a)

Pollutant: Acetaldehyde (HAP)

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant: Single HAP ⁽¹⁾

Emission Limit(s): 0.24 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

⁽¹⁾ The specific Individual HAPs are acrolein, formaldehyde, and methanol.

Pollutant: Total HAP

Emission Limit(s): 0.59 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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 comply with the applicable standards in 40 CFR Part 60, Subpart Db – *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* [§60.40b - §60.49b], including those not specifically mentioned in this permit. If differences in language are found between this permit and Subpart Db, the language specified in Subpart Db shall be considered correct.
- B. The owner or operator shall operate the Thermal Oxidizers (CE C10a, CE C10b) at all times that process streams are being vented to the equipment.
- C. During operation, the Thermal Oxidizers (CE C10a, CE C10b) shall maintain a minimum operating temperature (3-hour average) of 1500 degrees Fahrenheit.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the Thermal Oxidizer. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
 - ii. The owner or operator shall keep hourly records of the operating temperature of the Thermal Oxidizer and record all periods (during actual operations) where the 3-hour block average temperature is less than 1500 degrees Fahrenheit. This requirement shall not apply on the days the Thermal Oxidizer, or the equipment the Thermal Oxidizer

controls, is not in operation.

- D. The DDGS Dryers (EU 1, EU 2, EU 3, and EU 4) and the Thermal Oxidizers (CE C10a, CE C10b) shall combust only natural gas and/or process off-gases. The Waste Heat Recovery Boiler (EU B, EU 10B) shall not combust any supplemental fuel.
- i. As indicated in 40 CFR §60.49b(d)(1), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the thermal oxidizer/heat recovery boiler system during each day. In addition, the owner or operator shall calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. Per 40 CFR §60.41b, the *annual capacity factor* is defined as the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.
- E. The owner or operator shall inspect and maintain the Thermal Oxidizers (CE C10a, CE C10b) according to the facility's (Plant No. 17-01-100) operation and maintenance plan.
- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
 - The date and time any inspection and/or maintenance was performed on the control equipment;
 - Any issues identified during the inspection;
 - Any issues addressed during the maintenance activities; and,
 - Identification of the staff member performing the maintenance or inspection.
- F. The owner or operator shall demonstrate compliance with the emission limits for NO_x (lb/MMBtu) on a continuous basis through the use of a 30-day rolling average emission rate.
- G. The owner or operator shall maintain records of the following information for each steam generating unit operating day and it shall be submitted in a quarterly report.
- i. Calendar date;
 - ii. The average hourly NO_x emission (as NO₂) rates measured;
 - iii. The 30-day average NO_x emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
 - iv. Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the BACTNO_x emission standard, with the reasons for such excess emissions as well as a description of corrective actions taken;
 - v. 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;
 - vi. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
 - vii. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
 - viii. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
 - ix. Description of any modifications to the CEMS that could affect the ability of the

- CEMS to comply with Performance Specification 2 or 3; and
- x. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

NSPS and NESHAP Applicability

The heat recovery boilers (EU 10B, EU B) are subject to NSPS subpart Db - Standards of Performance for *Industrial- Commercial-Institutional Steam Generating Units*. It is also subject to NSPS subpart A - *General Provisions*.

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3
40 CFR Part 60 Subpart Db
567 IAC 23.1(2)"ccc"

Terms and Conditions: The Permittee shall comply with all applicable requirements of *Iowa Department of Natural Resources Administrative Consent Order No. 2015-AQ-06*.

See Appendix B.

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 125

Stack Opening, (inches, dia.): 72

Exhaust Flow Rate (scfm): 100,000

Exhaust Temperature (°F): 300

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

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

Monitoring Requirements

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

Opacity Monitoring

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

corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Continuous Emission Monitoring

A. The following monitoring systems are required by the construction permits:

i. *NO_x*:

The owner or operator shall:

Install, calibrate, maintain, and operate a CEMS and record the output of the system, for measuring nitrogen oxides (NO_x) emissions discharged to the atmosphere.

The CEMS data recorder output range shall include zero and a high-level value. The high-level value shall be chosen and recorded by the owner or operator. The CEMS design shall also allow the determination of calibration drift at the zero and high-level values. If this is not possible or practical, the design must allow these determinations to be conducted at a low-level value (zero to 20 percent of the high-level value) and at a value between 50 and 100 percent of the high-level value.

The CEMS shall be installed at an accessible location where the pollutant concentration or emission rate measurements are directly representative or can be corrected so as to be representative of the total emissions from the affected facility or at the measurement location cross section or in accordance with an IDNR approved plan.

The owner or operator shall develop and implement a QC program. At a minimum, each QC program must include written procedures which describe in detail, complete, step-by-step procedures and operations for each of the following activities:

1. Calibration of CEMS.
2. Calibration drift determination and adjustment of CEMS.

3. Preventive maintenance of CEMS (including spare parts inventory).
4. Data recording, calculations, and reporting.
5. Accuracy audit procedures including sampling and analysis methods.
6. Program of corrective action for malfunctioning CEMS.

Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies, as per 40 CFR 60, Appendix F.

These written procedures must be kept on record and available for inspection by the enforcement agency.

ii. *Flowmeter:*

The owner or operator demonstrating compliance with the output-based standard of the BACT Emission Limits shall install, certify, operate, and maintain a continuous flow monitoring system meeting the requirements of 40 CFR 60, Appendix B, Performance Specification 6 and 40 CFR 60, Appendix F, Procedure 1. In addition, the owner or operator shall record the output of the system, for measuring the volumetric flow of exhaust gases discharged to the atmosphere.

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

- i. The CEMS required by this permit shall be operated and data recorded during all periods of operation of the emission units associated with EP S10a, except for CEMS breakdowns and repairs. Data is recorded during calibration checks and zero and span adjustments.
- ii. The 1-hour average NO_x emission rates measured by the CEMS required by this permit shall be used to calculate compliance with the emission standards in this permit. At least two data points must be used to calculate each 1-hour average.
- iii. For each hour of missing emission data (NO_x), the owner or operator shall substitute data by:
 1. If the quarterly monitor data availability is equal to or greater than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - (i) For a missing data period less than or equal to 24 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (ii) For a missing data period greater than 24 hours, substitute the greater of:
 - a. The 90th percentile hourly concentration recorded by a pollutant concentration monitor during the previous 2160 quality-assured monitor operating hours; or,
 - b. The average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing

data period.

2. If the quarterly monitor data availability is at least 90.0% but less than 95.0%, the permittee shall calculate substitute data by means of the automated data acquisition and handling system for each hour of each missing data period according to the following procedures:
 - (i) For a missing data period of less than or equal to 8 hours, substitute the average of the hourly concentrations recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
 - (ii) For a missing data period of more than 8 hours, substitute the greater of:
 - a. The 95th percentile hourly pollutant concentration recorded by a pollutant concentration monitor during the previous 2160 quality-assured monitor operating hours; or,
 - b. The average of the hourly concentration recorded by a pollutant concentration monitor for the hour before and the hour after the missing data period.
3. If the quarterly monitor data availability is less than 90.0%, the owner or operator shall obtain actual emission data by an alternate testing or monitoring method approved by the Department.

Authority for Requirement: DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Stack Testing

Pollutant – Particulate Matter (PM₁₀)

Stack Test to be Completed by – March 5, 2019

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

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

Stack Test to be Completed by - March 5, 2019

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 – Volatile Organic Compounds (VOC) (% reduction or ppm) ⁽¹⁾

Stack Test to be Completed by – Annual

Test Method – 40 CFR 60, Appendix A, Method 25A

Authority for Requirement – DNR Construction Permits 03-A-600-P5, 05-A-780-P3

- ⁽¹⁾ VOC reduction to be determined with inlet/outlet testing using 40 CFR 60, Appendix A, Method 25A and VOC ppm_v limit to be expressed in ppm_v, dry, as propane.

Pollutant – Volatile Organic Compounds (VOC) (lb/hr)

Stack Test to be Completed by – Annual

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

40 CFR 63, Appendix A, Method 320

Authority for Requirement – DNR Construction Permits 03-A-600-P5, 05-A-780-P3

Pollutant – Acetaldehyde (HAP)

Stack Test to be Completed by – Annual ⁽²⁾

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

Authority for Requirement – DNR Construction Permits 03-A-600-P5, 05-A-780-P3

⁽²⁾ Annual stack testing shall be conducted for acetaldehyde with a minimum of four months between tests.

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S15

Associated Equipment

Associated Emission Unit ID Numbers: EU P15
Emissions Control Equipment ID Number: CE C15
Emissions Control Equipment Description: Reverse Air Baghouse

Emission Unit vented through this Emission Point: EU P15
Emission Unit Description: Grain Unloading, Conveyors, 4 Storage Bins
Raw Material/Fuel: Grain
Rated Capacity: 30,000 bu/hr (Unloading and Conveyors), 1.375 million bushels (Storage)

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.

BACT Emission Limits

Pollutant: Opacity
Emission Limit(s): 0% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 03-A-601P-S4

⁽¹⁾ An exceedence of the indicator opacity of “0%” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.0012 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601P-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.0012 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601P-S4

Other Emission Limits

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.40 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-601P-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601P-S4
567 IAC 23.4(7)

Operational Limits & Requirements

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

Operating Limits

- A. The owner or operator shall inspect and maintain the control equipment according to manufacturer's recommendations.
- B. Grain unloading shall be done using a "choke flow" method to minimize fugitive dust emissions.
- C. The grain bins shall be filled only while under negative pressure control and vented to the control equipment.

Authority for Requirement: DNR Construction Permit 03-A-601P-S4

Reporting and Recordkeeping

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

- A. The owner or operator shall keep records of control equipment inspections and maintenance. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.
- B. The owner or operator shall establish procedures to insure the bin fans are not in operation during loading/unloading operations (i.e., lockout/tagout).

Authority for Requirement: DNR Construction Permit 03-A-601P-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 39,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-601P-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that either the

temperature or flowrate above are different than the values stated, the owner or operator shall submit a request to the Department within thirty (30) days of the discovery to determine if a permit amendment is required or submit a permit application requesting to amend the permit.

Monitoring Requirements

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

Opacity Monitoring

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Stack Testing

Pollutant – Particulate Matter (PM₁₀)

Stack Test to be Completed by - March 5, 2019

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

Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)

Stack Test to be Completed by - March 5, 2019

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

40 CFR 51, Appendix M, Method 202

Authority for Requirement – 567 IAC 22.108(3)

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

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring Plan

CAM Plan for EP S15 Baghouse

I. Background

A. Emissions Unit

Description: Grain Receiving Baghouse
 Identification: EU P15
 Facility: Golden Grain Energy, LLC
 1822 43rd Street SW
 Mason City, IA 50401

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permit 03-A-601P-S4
 567 IAC 23.4(7)
 Particulate emission limit: PM: 0.0012 gr/dscf; 0.1 gr/dscf
 PM₁₀: 0.0012 gr/dscf; 0.40 lb/hr

C. Control Technology

Reverse Air Baghouse (Pulse jet cleaning or equivalent technology)

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table A. The selected performance indicators are baghouse module differential pressure and visible emissions.

Table A – Monitoring Approach

	Indicator #1	Indicator #2
I. Indicator	Differential pressure across baghouse	Visible Emissions
Measurement Approach	Differential pressure measured across the baghouse by a magnetic pressure gauge.	Visible emissions from baghouse exhaust while EU-S15 is operating.
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable range is 0.5 – 8 inches water. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible	An excursion is defined as any visible emission occurring. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible emissions observation (similar to Method 22).

	emissions observation (similar to Method 22).	
III. Performance Criteria		
A. Data Representativeness	The differential pressure is measured across the baghouse.	Visible emissions observations are made at the emission point and on the external baghouse unit, system ductwork and associated components.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauges will be calibrated, operated, and maintained according to the manufacturer's specifications.	The observer will be trained by Golden Grain Energy, LLC to detect visible emissions.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	No visible emissions (NVE) observations are made at the emission point on a weekly basis.
E. Data Collection Procedures	Pressure drop is manually recorded daily. The observation log includes the observation date, time, and pressure drop reading and whether or not the pressure drop was within the range specified in the permit. These observation log will be kept a minimum of 5 years.	Visible emissions reading recorded weekly. The observation log includes the observation date, time, and whether or not any visible emissions were observed. The observation log shall be maintained for a minimum of 5 years.

Emission Point ID Numbers: EP S30a and EP S30b

Associated Equipment

Associated Emission Unit ID Numbers: EU-P30, EU-P30b
 Emissions Control Equipment ID Number: CE-C30, CE-C30b
 Emissions Control Equipment Description: Baghouses

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity (tons/hr)
EP S30a	EU P30	Hammermill and Corn Day Bin	Grain	70
EP S30b	EU P30B	Hammermill		70

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.41 lb/hr; 1.8 tons/yr; 0.003 gr/dscf

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.41 lb/hr; 1.8 tons/yr; 0.003 gr/dscf

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

Operational Limits & Requirements

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

Operating Limits

A. All control equipment shall be maintained according to the manufacturer's specifications.

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

Reporting and Recordkeeping

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

A. The owner or operator shall maintain a record of all inspections of the control equipment. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 32

Exhaust Flow Rate (scfm): 16,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 03-A-602P-S2, 05-A-781P

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

Monitoring Requirements

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

Opacity Monitoring

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

corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Stack Testing

Pollutant – Particulate Matter (PM₁₀)⁽¹⁾
Stack Test to be Completed by - March 5, 2019
Test Method – 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)⁽¹⁾
Stack Test to be Completed by - March 5, 2019
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

- ⁽¹⁾ Stack test results from one hammermill may be used to demonstrate compliance with both hammermills.

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)

Compliance Assurance Monitoring Plan

CAM Plan for EP S30a and EP S30b Baghouses

I. Background

A. Emissions Unit

Description: Hammermilling Baghouses
 Identification: EU P30, EU P30b
 Facility: Golden Grain Energy, LLC
 1822 43rd Street SW
 Mason City, IA 50401

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permits 03-A-602P-S2,
 05-A-781P
 567 IAC 23.4(7)
 Particulate emission limit: PM/PM₁₀: 0.003 gr/dscf; 0.41 lb/hr; 1.8 tons/yr

C. Control Technology

Reverse Air Baghouse (Pulse jet cleaning or equivalent technology)

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table A. The selected performance indicators are baghouse module differential pressure and visible emissions.

Table A – Monitoring Approach

	Indicator #1	Indicator #2
I. Indicator	Differential pressure across baghouse	Visible Emissions
Measurement Approach	Differential pressure measured across the baghouse by a magnetic pressure gauge.	Visible emissions from baghouse exhaust while EU-P30 and EU-P30b are operating.
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable range is 0.5 – 8 inches water. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible	An excursion is defined as any visible emission occurring. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible emissions observation (similar to Method 22).

	emissions observation (similar to Method 22).	
III. Performance Criteria		
A. Data Representativeness	The differential pressure is measured across the baghouse.	Visible emissions observations are made at the emission point and on the external baghouse unit, system ductwork and associated components.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauges will be calibrated, operated, and maintained according to the manufacturer's specifications.	The observer will be trained by Golden Grain Energy, LLC to detect visible emissions.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	No visible emissions (NVE) observations are made at the emission point on a weekly basis.
E. Data Collection Procedures	Pressure drop is manually recorded daily. The observation log includes the observation date, time, and pressure drop reading and whether or not the pressure drop was within the range specified in the permit. These observation log will be kept a minimum of 5 years.	Visible emissions reading recorded weekly. The observation log includes the observation date, time, and whether or not any visible emissions were observed. The observation log shall be maintained for a minimum of 5 years.

Emission Point ID Number: EP S35

Associated Equipment

Associated Emission Unit ID Numbers: EU P35a, EU P35b, EU P35c

Emissions Control Equipment ID Number: CE C35a, CE C35b, CE C35c

Emissions Control Equipment Description: Reverse Air Baghouses and Bin Vent Filter System

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity
EP S35	EU P35a	Hammermill	Grain	60 tons/hr
	EU P35b	Hammermill		60 tons/hr
	EU P35c	Surge Bin		3,600 bushels

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Opacity

Emission Limit(s): 40% ⁽¹⁾

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

DNR Construction Permit 12-A-289

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.56 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-289

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.56 lb/hr; 0.1 gr/dscf

Authority for Requirement: 567 IAC 23.4(7)

DNR Construction Permit 12-A-289

Operational Limits & Requirements

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

Operating Limits

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

Authority for Requirement: DNR Construction Permit 12-A-289

Reporting and Recordkeeping

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

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

Authority for Requirement: DNR Construction Permit 12-A-289

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 130

Stack Opening, (inches, dia.): 26

Exhaust Flow Rate (scfm): 13,100

Exhaust Temperature (8F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 12-A-289

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Compliance Assurance Monitoring Plan

CAM Plan for EP S35 Baghouses

I. Background

A. Emissions Unit

Description: Hammermilling Baghouses
 Identification: EU P35a, EU P35b
 Facility: Golden Grain Energy, LLC
 1822 43rd Street SW
 Mason City, IA 50401

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permit 12-A-289
 567 IAC 23.4(7)
 Particulate emission limit: PM: 0.1 gr/dscf, 0.56 lb/hr
 PM₁₀: 0.56 lb/hr

C. Control Technology

Reverse Air Baghouses (Pulse jet cleaning or equivalent technology)

II. Monitoring Approach

The key elements of the monitoring approach are presented in Table A. The selected performance indicators are baghouse module differential pressure and visible emissions.

Table A – Monitoring Approach

	Indicator #1	Indicator #2
I. Indicator	Differential pressure across baghouse	Visible Emissions
Measurement Approach	Differential pressure measured across the baghouse by a magnetic pressure gauge.	Visible emissions from baghouse exhaust while EU-P35a and EU-P35b are operating.
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable range is 0.5 – 8 inches water. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible	An excursion is defined as any visible emission occurring. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible emissions observation (similar to Method 22).

	emissions observation (similar to Method 22).	
III. Performance Criteria		
A. Data Representativeness	The differential pressure is measured across the baghouse.	Visible emissions observations are made at the emission point and on the external baghouse unit, system ductwork and associated components.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauges will be calibrated, operated, and maintained according to the manufacturer's specifications.	The observer will be trained by Golden Grain Energy, LLC to detect visible emissions.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	No visible emissions (NVE) observations are made at the emission point on a weekly basis.
E. Data Collection Procedures	Pressure drop is manually recorded daily. The observation log includes the observation date, time, and pressure drop reading and whether or not the pressure drop was within the range specified in the permit. These observation log will be kept a minimum of 5 years.	Visible emissions reading recorded weekly. The observation log includes the observation date, time, and whether or not any visible emissions were observed. The observation log shall be maintained for a minimum of 5 years.

Emission Point ID Numbers: EP S40a, EP S40b, and EP S40c

Associated Equipment

Associated Emission Unit ID Numbers: EU P40a, EU P40b, EU P40c

Emissions Control Equipment ID Number: CE C40a, CE C40b, CE C40c

Emissions Control Equipment Description: Packed Bed Scrubbers

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity (gal/hr)
EP S40a	EU P40a	Fermentation – 8 Process Vessels, Beer Well	Corn Slurry/Yeast/Beer	17,123
EP S40b	EU P40b	Fermentation – 8 Process Vessels, Beer Well		17,123
EP S40c	EU P40c	Fermentation – 8 Process Vessels, Beer Well		17,123

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

BACT Emission Limits for EP S40a and EP S40b

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 6.1 lb/hr; 26.72 tons/yr; 95% reduction or 100 ppmv ⁽¹⁾

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3

⁽¹⁾ VOC reduction to be determined with inlet/outlet testing using 40 CFR 60, Appendix A, Method 25A and VOC ppm_v limit to be expressed in ppm_v, dry, as propane.

Emission Limit for EP S40c Only

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 6.1 lb/hr

Authority for Requirement: DNR Construction Permit 12-A-119-S2

Other Emission Limits for EP S40a, EP S40b, and EP S40c

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

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

DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

⁽¹⁾ An exceedence 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 exceedence. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

For Pollutant: Acetaldehyde (HAP)

Emission Limit(s): 0.35 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Pollutant: Individual HAP ⁽²⁾

Emission Limit(s): 0.10 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

The specific Individual HAPs are acrolein, formaldehyde, and methanol.

Pollutant: Total HAP

Emission Limit(s): 0.65 lb/hr

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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 facility shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 60.489. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
- B. The Fermentation Scrubbers (C40a, C40b, C40c) shall maintain an average pressure drop across the wet scrubber that is greater than 2 inches water column based on a 24-hour averaging period.
 - i. The facility shall establish an alarm setting for the purpose of initiating corrective action based on a pressure drop across the wet scrubber of 2 inches water column or less.
 - ii. The owner or operator shall properly operate and maintain equipment to continuously monitor the differential pressure drop for the Fermentation Scrubbers (C40a, C40b, C40c).

- a) The owner or operator shall collect and record the differential pressure drop, at a minimum of every 30 minutes. On those days when there is an alarm for the pressure drop reaching 2 inches water column or less, calculate and record the average pressure drop across the scrubber based on a 24-hour average.
 - b) If the pressure drop deviates below the minimum required, then record the time, date and actions taken to correct the situation and when the pressure drop is back above the minimum average pressure drop required.
 - iii. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- C. The Fermentation Scrubbers (C40a, C40b, C40c) shall have a minimum scrubber liquid (water) flow rate which is calculated as 90 percent of the total liquid flow rate at the inlet to the wet scrubber measured during a previous performance test demonstrating compliance with all applicable emission limitations. Compliance with the water flow rate shall be determined based on a 24-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the scrubber liquid (water) flow rate.
 - a) The owner or operator shall collect and record the water flow rate, at a minimum of every 30 minutes. On those days when there is an alarm for the flow rate deviating below the minimum flow rate required, calculate and record the water flow rate based on a 24-hour block average.
 - b) If the flow rate deviates below the minimum flow rate required (i.e., 90% of the flow rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and when the flow rate is back above the minimum flow rate required.
 - ii. During periods of startup or shutdown, the water flow rate shall be maintained at 90 percent of the total liquid flow rate at the inlet to the wet scrubber measured during a previous performance test demonstrating compliance until the fermentation gas rates, as indicated by pressure drop, are less than the rates measured during the most recent stack test demonstrating compliance.
 - iii. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
- D. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubber shall be added at a rate greater than or equal to the rate recorded during a previous performance test that demonstrated compliance with all applicable emission limitations. Compliance with the chemical addition rate shall be determined based on a 24-hour block average.
 - i. The owner or operator shall properly operate and maintain equipment to continuously monitor the rate of additive added (chemical addition feed rate) to the scrubber liquid.
 - a) The owner or operator shall collect and record the additive feed rate, at a minimum of every 30 minutes. On those days when there is an alarm for the additive feed rate deviating below the minimum required, calculate and record the additive feed rate based on a 24-hour block average.
 - b) If the chemical addition feed rate deviates below the rate required (i.e., chemical addition feed rate during a previous performance test that demonstrated compliance), then record the time, date and actions taken to correct the situation and also when the chemical addition feed rate is greater than or equal to the

- ii. required chemical addition feed rate.
 - ii. This requirement shall not apply on the days that the scrubber or the equipment that the scrubber controls is not in operation.
 - iii. During periods of startup or shutdown, the chemical addition rate shall be maintained at rate greater than or equal to the rate recorded during a previous performance test that demonstrated compliance until the fermentation gas rates, as indicated by pressure drop, are less than the rates measured during the most recent stack test demonstrating compliance.
- E. The Scrubbers (CE C40a, CE C40b, CE C40c) shall be operated and maintained per the facility's (Plant ID 17-01-100) operating and maintenance plans with inspections occurring at a minimum of once per calendar year.
- i. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C40a, CE C40b, and CE C40c. This log shall include, but is not limited to:
 - a) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - b) Any issue(s) identified during the inspection and the date each issue(s) was resolved;
 - c) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
 - d) Identification of the staff member performing the inspection or maintenance activity.
 - ii. Any deviations from the control equipment operating parameters detailed in the Operating Requirements and Associated Recordkeeping section of this permit (i.e., pressure drop, scrubber liquid flow rate, and additive feed rate) shall be reported to the department each calendar quarter within 30 days of the end of the reporting period. The report shall include:
 - a) The identity of the equipment or source operation from which the deviation is being reported;
 - b) The time and duration of the deviation;
 - c) The cause of the deviation;
 - d) The steps taken to remedy the deviation; and,
 - e) Whether the deviation resulted in excess emissions.
- F. Maintain onsite a copy of the previous performance tests for each scrubber operating scenario detailing scrubber pressure drop, scrubber liquid flow rate, and chemical addition feed rate measured during each performance test, which demonstrated compliance with the Emission Limits. This requirement began with the initial performance test required for EP S40a, S40b, and S40c.

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Emission Point Characteristics

Each of these emission points shall conform to the specifications listed below.

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

Stack Opening, (inches, dia.): 20

Exhaust Flow Rate (scfm): 5,100

Exhaust Temperature (°F): 75

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

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

Monitoring Requirements

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

Opacity Monitoring

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Stack Testing

For EP S40a and EP S40b

Pollutant – Volatile Organic Compounds (VOC) (% reduction or ppm)

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

Test Method – 40 CFR 60, Appendix A, Method 25A

Authority for Requirement – DNR Construction Permits 03-A-603-P5, 05-A-782-P3

For EP S40a, EP S40b, and EP S40c

Pollutant – Volatile Organic Compounds (VOC) (lb/hr)

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

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

Authority for Requirement – DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Pollutant – Acetaldehyde (HAP)

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

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

Authority for Requirement – DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Pollutant – Individual HAP

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

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

Authority for Requirement – DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

Pollutant – Total HAP

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

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

Authority for Requirement – DNR Construction Permits 03-A-603-P5, 05-A-782-P3,
12-A-119-S2

⁽¹⁾The owner or operator shall either conduct representative annual compliance testing for the fermentation scrubber emission points (EP S40a, EP S40b, & EP S40c) or annually conduct compliance testing on all three (3) emission points. Compliance testing shall occur between the months of June – August. Additional testing to establish non-summer (September – May) operating parameters may be completed. Should the facility wish to incorporate additional operating scenarios resulting from the non-summer testing, a permit amendment would be required.

⁽²⁾ Should the owner or operator decide to conduct representative annual compliance testing, it shall be conducted on one (1) of the following emission points EP S40a, EP S40b, or EP S40c. The results from

that compliance test shall be considered representative for the other emission points. The owner or operator shall alternate the testing of these emission points, as part of representative testing allowed by this permit, so that each point will be tested, at a minimum, once every three calendar years.

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 Numbers: EP S70a and EP S70b

Associated Equipment

Associated Emission Unit ID Numbers: EU P70a, EU P70b
Emissions Control Equipment ID Number: CE C70a, CE C70b
Emissions Control Equipment Description: Baghouses

Emission Unit vented through this Emission Point: EU P70a, EU P70b
Emission Unit Description: DDGS Cooler Cyclone
Raw Material/Fuel: DDGS
Rated Capacity: 27.52 tons/hr (each)

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

BACT Emission Limits

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 3.94 tons/yr; 0.003 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.94 tons/yr; 0.003 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.3 lb/hr; 14.45 tons/yr
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Other Emission Limits

Pollutant: Opacity
Emission Limit(s): 0% ⁽¹⁾
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

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

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.90 lb/hr
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.90 lb/hr
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant: Acetaldehyde (HAP)
Emission Limit(s): 0.25 lb/hr; 9.4 tons/yr (Plant-wide Limit)
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant: Individual HAP ⁽²⁾
Emission Limit(s): 0.50 lb/hr; 9.4 tons/yr (Plant-wide Limit)
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

⁽²⁾The specific Individual HAPs are acrolein, formaldehyde, and methanol.

Pollutant: Total HAP
Emission Limit(s): 1.10 lb/hr; 24.4 tons/yr (Plant-wide Limit)
Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Operational Limits & Requirements

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

Operating Limits

- A. The facility shall inspect and maintain the control equipment according to manufacturer's recommendations.
- B. The facility shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 60.489.

Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Reporting and Recordkeeping

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

- A. The owner or operator shall keep records of control equipment inspections and maintenance.
- B. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 118
Stack Opening, (inches, dia.): 40
Exhaust Flow Rate (scfm): 35,000
Exhaust Temperature (°F): 85
Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

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

Monitoring Requirements

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

Opacity Monitoring

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Stack Testing

Pollutant – Particulate Matter (PM₁₀)
Stack Test to be Completed by - March 5, 2019
Test Method – 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement – 567 IAC 22.108(3)

Pollutant – Particulate Matter (PM)
Stack Test to be Completed by - March 5, 2019
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 – Acetaldehyde (HAP)
Stack Test to be Completed by – Semi-annual ⁽¹⁾
Test Method – 40 CFR 60, Appendix A, Method 18 or 320, or IDNR approved method
Authority for Requirement – DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

Pollutant – Total HAP
Stack Test to be Completed by – Annual ⁽²⁾
Test Method – 40 CFR 60, Appendix A, Method 18 or 320, or IDNR approved method
Authority for Requirement – DNR Construction Permits 03-A-604P-S4, 05-A-783P-S2

⁽¹⁾ Compliance testing for acetaldehyde for this unit shall be conducted on a semiannual basis with a minimum of 4 months between tests. After 2 years, the facility may request the Department to reevaluate the need for continued periodic compliance testing.

⁽²⁾ Initial testing demonstrated compliance on 11/25/09. Compliance testing for Total HAPs for this unit shall be conducted on an annual basis with a minimum of 6 months between tests. After 2 years, the facility may request the Department to reevaluate the need for continued periodic compliance testing.

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 Numbers: EP-P80a and EP-P80b

Associated Equipment

Associated Emission Unit ID Numbers: EU P80a, EU P80b
Emissions Control Equipment ID Number: CE P80a, CE P80b
Emissions Control Equipment Description: Drift Eliminator, 0.005%

Emission Unit vented through this Emission Point: EU P80a, EU P80b
Emission Unit Description: Cooling Tower
Raw Material/Fuel: Water
Rated Capacity: 1.28 MMgal/hr (each)

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: 567 IAC 23.3(2) "d"

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 1.33 lb/hr *; 5.84 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-054P; 05-A-784P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.33 lb/hr *; 5.84 tons/yr; 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3 (2)"a"
DNR Construction Permit 06-A-054P; 05-A-784P

*BACT limits

Operational Limits & Requirements

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

Operating Limits

A. This Total Dissolved Solids (TDS) in the process water in each cooling tower shall not exceed 2500 ppm.

Authority for Requirement: DNR Construction Permit 06-A-054P; 05-A-784P

Reporting and Recordkeeping

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

A. The owner or operator shall test the Total Dissolved Solids (TDS) at least once per month.

Authority for Requirement: DNR Construction Permit 06-A-054P; 05-A-784P

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36

Stack Opening (feet, diameter): 25, each cell

Exhaust Flow Rate (acfm): 1,500,000 each cell

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 06-A-054P; 05-A-784P

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP 80c

Associated Equipment

Associated Emission Unit ID Numbers: EU P80c

Emissions Control Equipment ID Number: CE P80c

Emissions Control Equipment Description: Drift Eliminator, 0.001% Total Drift Loss

Emission Unit vented through this Emission Point: EU P80c

Emission Unit Description: Cooling Tower, 4 cells

Raw Material/Fuel: Water

Rated Capacity: 45,000 gal/min

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

Pollutant: Particulate Matter (PM_{2.5})

Emission Limit(s): 1.13 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-461

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.13 lb/hr

Authority for Requirement: DNR Construction Permit 15-A-461

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.13 lb/hr; 0.1 gr/dscf

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

DNR Construction Permit 15-A-461

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) concentration in the cooling water shall not exceed 5000 parts per million by weight (5000 mg/L) for any single sampling event.
- B. The owner or operator shall conduct TDS testing on a quarterly basis. Testing includes conductivity testing with a correlation to determine the TDS concentration.
- C. The emission unit, EU P80c, and control equipment, CE P80c, shall be operated and

maintained according to the manufacturer's specification with inspections occurring at a minimum of once per calendar year

Authority for Requirement: DNR Construction Permit 15-A-461

Reporting and Recordkeeping

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

- A. The owner or operator shall maintain records of the quarterly TDS sampling/testing results. The records shall include the testing dates and the methods used to determine the concentration of TDS in the circulating water.
- B. A log of all maintenance and inspection activities performed on the emission unit, EU P80c, and control equipment, CE P80c. This log shall include, but is not limited to:
 - (i) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - (ii) Any issue(s) identified during the inspection and the date each issue(s) was resolved;
 - (iii) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
 - (iv) Identification of the staff member performing the inspection or maintenance activity.

Authority for Requirement: DNR Construction Permit 15-A-461

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36

Stack Opening (feet, diameter): 25 (per cell)

Exhaust Flow Rate (acfm): 1,500,000 (per cell)

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-461

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP 80d

Associated Equipment

Associated Emission Unit ID Numbers: EU P80d
Emissions Control Equipment ID Number: CE P80d
Emissions Control Equipment Description: Drift Eliminator

Emission Unit vented through this Emission Point: EU P80d
Emission Unit Description: Cooling Tower, 4 cells
Raw Material/Fuel: Water
Rated Capacity: 21,333 gal/min

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Opacity
Emission Limit(s): 40% ⁽¹⁾
Authority for Requirement: DNR Construction Permit 15-A-462-S1
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM_{2.5})
Emission Limit(s): 0.54 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-462-S1

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 0.54 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-462-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.54 lb/hr; 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3 (2)
DNR Construction Permit 15-A-462-S1

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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 circulating water in the cooling tower shall not exceed 5000 parts per million (ppm) total dissolved solids (TDS).
 - i. Monitoring of the TDS shall be conducted, at a minimum, on a quarterly schedule. Testing includes conductivity testing with a correlation to determine the TDS concentration. A minimum of one (1) grab sample shall be collected and analyzed each quarter. Should more than one (1) grab sample be collected and analyzed the average of the analyses shall be used to demonstrate compliance with the TDS limit.
 - ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
- B. The Mist Eliminator (CE P80d) shall be designed to meet a control efficiency of 0.001% (gallons of drift per gallon of cooling water flow) or better.
 - i. The cooling tower shall be operated and maintained per the facility's (Plant ID 17-01-100) operating and maintenance plans with inspections occurring at a minimum of once per calendar year.
 - ii. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the emission unit, EU P80d, and control equipment, CE P80d. This log shall include, but is not limited to:
 - a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
 - b. Any issue(s) identified during the inspection and the date each issue(s) was resolved;
 - c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
 - d. Identification of the staff member performing the inspection or maintenance activity.
- C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
 - i. The owner or operator shall maintain MSDS, or equivalent technical sheets, for all water treatment chemicals used in the cooling tower.

Authority for Requirement: DNR Construction Permit 15-A-462-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36

Stack Opening (inches, diameter): 300 (per cell)

Exhaust Flow Rate (acfm): 428,277 (per cell)

Exhaust Temperature (°F): 85

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 15-A-462-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP S90

Associated Equipment

Associated Emission Unit ID Numbers: EU P90
Emissions Control Equipment ID Number: CE C90
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: EU P90
Emission Unit Description: DDGS Loading
Raw Material/Fuel: DDGS
Rated Capacity: 482,143 tons/yr

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾*

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

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

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.1 lb/hr; 0.44 tons/yr; 0.0023 gr/dscf*

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 lb/hr; 0.44 tons/yr; 0.0023 gr/dscf*

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

*BACT Limits

Operational Limits & Requirements

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

Operating Limits

- A. All control equipment shall be maintained according to the manufacturer's specifications.
- B. A maximum of 482,143 tons of Distillers Dried Grain and Solubles (DDGS) shall be produced, plant wide, per twelve-month rolling period.

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

Reporting and Recordkeeping

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

- A. The owner or operator shall maintain a record of all inspections of the control equipment. The owner or operator shall document the results of the inspections and note any repairs that were the result of the inspections.
- B. The owner or operator shall maintain records of the amount of DDGS produced, plant wide, and update the twelve-month rolling total on a monthly basis.

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40

Stack Opening, (inches, dia.): 14

Exhaust Flow Rate (scfm): 5,000

Exhaust Temperature (°F): Ambient

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 03-A-605P-S2

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

Monitoring Requirements

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

Opacity Monitoring

Visible emissions shall be observed on a weekly basis to ensure there are none when the emission unit on this emission point is at or near full capacity. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required within 48 hours. If an opacity (>0 %) is observed, this would be a violation and corrective action will be taken as soon as possible, but no later than eight hours from observation of the violation.

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

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

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

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

Facility operation and maintenance plans are to be developed by the facility within six (6) months of the issuance date of this permit and the data pertaining to the plan maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility’s implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22

Associated Equipment

Associated Emission Unit ID Numbers: EU 22, EU 122

Emissions Control Equipment ID Number: CE 22

Emissions Control Equipment Description: Vapor Recovery and Loadout Flare
(Natural Gas; 4.5 MMBtu/hr)

Emission Unit vented through this Emission Point: EU 22, EU 122

Emission Unit Description: Truck Loadout and Rail Loadout

Raw Material/Fuel: Denatured Ethanol

Rated Capacity: 600 gal/min (truck); 1000 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.

BACT Emission Limits

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 03-A-607-P6

⁽¹⁾ Visible emissions are allowed for no more than 5 minutes in any 2 consecutive hours.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 1.34 tons/yr

Authority for Requirement: DNR Construction Permit 03-A-607-P6

Pollutant: Particulate Matter (PM)

Emission Limit(s): 1.34 tons/yr

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

DNR Construction Permit 03-A-607-P6

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 1.34 tons/yr

Authority for Requirement: DNR Construction Permit 03-A-607-P6

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 7.3 tons/yr

Authority for Requirement: DNR Construction Permit 03-A-607-P6

Other Emission Limits

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

DNR Construction Permit 03-A-607-P6

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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 flare (EU 22 & EU 122) shall be fueled with natural gas as fuel to maintain the auto-ignited pilot flame, maintain pressure to the flare during idling, and as an enrichment fuel if needed.
 - i. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame prior to loading.
- B. The facility is allowed to loadout ethanol via either the truck loadout (EU 22) or the rail loadout (EU 122) at any one time with emissions being controlled by this flare (CE 22).
 - i. The owner or operator shall properly maintain equipment used to continuously monitor the flame during ethanol loading.
 - ii. The facility shall use a "permissive switch" to limit loading to one truck or one rail car at a time.
- C. This loadout flare shall be operated no more than 6000 hours per twelve-month rolling period.
 - i. The owner or operator shall record and maintain the following monthly records
 - ii. The number of hours that the flare was in operation,
 - iii. The emissions from the flare for each pollutant for that month,
 - iv. The rolling twelve (12) month total of the number of hours that the flare was in operation, and
 - v. The rolling twelve (12) month total emissions for each pollutant for each month of operation.
- D. The flare (EU 22 & EU 122) shall:
 - i. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - ii. Be operated with a flame present at all times ethanol is loaded.
 - iii. Be designed to ensure smokeless operation.
- E. A maximum of 155 million gallons of denatured ethanol may be loaded out, plant wide, per twelve-month rolling period.
 - i. The owner or operator shall maintain records of the amount of denatured ethanol loaded out plant wide, and update the twelve-month rolling total on a monthly basis

Authority for Requirement: DNR Construction Permit 03-A-607-P6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 3,280
Exhaust Temperature (°F): 1,800
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-607-P6

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 22b

Associated Equipment

Associated Emission Unit ID Numbers: EU 22b, EU 122b, EU 222b

Emissions Control Equipment ID Number: CE 22b

Emissions Control Equipment Description: Vapor Recovery and Rail Loadout Flare
(Natural Gas; 12.4 MMBtu/hr)

Emission Unit vented through this Emission Point: EU 22b, EU 122b, EU 222b

Emission Unit Description: Rail Loadout 2, 3, & 4

Raw Material/Fuel: Denatured Ethanol

Rated Capacity: 1000 gal/min (per loadout)

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.

BACT Emission Limits

Pollutant: Opacity

Emission Limit(s): 0% ⁽¹⁾

Authority for Requirement: DNR Construction Permit 08-A-235-P3

⁽¹⁾ Visible emissions are allowed for no more than 5 minutes in any 2 consecutive hours.

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 3.7 tons/yr

Authority for Requirement: DNR Construction Permit 08-A-235-P3

Pollutant: Particulate Matter (PM)

Emission Limit(s): 3.7 tons/yr

Authority for Requirement: DNR Construction Permit 08-A-235-P3

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 3.7 tons/yr

Authority for Requirement: DNR Construction Permit 08-A-235-P3

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 13.76 tons/yr

Authority for Requirement: DNR Construction Permit 08-A-235-P3

Other Emission Limits

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.1 gr/dscf

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

DNR Construction Permit 08-A-235-P3

Operating Requirements and Associated Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. 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 flare (CE 22b) shall be fueled with natural gas as fuel to maintain the auto-ignited pilot flame, maintain pressure to the flare during idling, and as an enrichment fuel if needed.
 - i. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame prior to loading.
 - ii. The owner or operator shall properly maintain equipment used to continuously monitor the flame during ethanol loading.
- B. This loadout flare shall be operated no more than 6000 hours per twelve-month rolling period.
 - i. The owner or operator shall record and maintain the following monthly records
 - a) The number of hours that the flare was in operation,
 - b) The emissions from the flare for each pollutant for that month,
 - c) The rolling twelve (12) month total of the number of hours that the flare was in operation, and
 - d) The rolling twelve (12) month total emissions for each pollutant for each month of operation.
- C. The flare (CE 22b) shall:
 - i. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.
 - ii. Be operated with a flame present at all times ethanol is loaded.
 - iii. Be designed to ensure smokeless operation.
- D. A maximum of 155 million gallons of denatured ethanol may be loaded out, plant wide, per twelve-month rolling period.
 - i. The owner or operator shall maintain records of the amount of denatured ethanol loaded out plant wide, and update the twelve-month rolling total on a monthly basis

Authority for Requirement: DNR Construction Permit 08-A-235-P3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 3,280
Exhaust Temperature (°F): 1,800
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 08-A-235-P3

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

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 25

Associated Equipment

Associated Emission Unit ID Numbers: EU 25

Emissions Control Equipment ID Number: N/A

Emission Unit vented through this Emission Point: EU 25

Emission Unit Description: Emergency Fire Pump

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 190 HP

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

Authority for Requirement: DNR Construction Permit 06-A-056P

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.42 lb/hr; 0.1 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-056P

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.42 lb/hr; 0.1 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-056P

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 0.39 lb/hr; 0.1 tons/yr; 2.5 lb/MMBtu

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

DNR Construction Permit 06-A-056P

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 5.9 lb/hr; 1.47 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-056P

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.47 lb/hr; 0.12 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-056P

Pollutant: Carbon Monoxide (CO)

Emission Limit(s): 1.27 lb/hr; 0.32 tons/yr

Authority for Requirement: DNR Construction Permit 06-A-056P

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

The emergency engine is subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR 63.6590(a)(1)(iii) this compression ignition emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

Compliance Date

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

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

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

Operating Limits 40 CFR 63.6640(f)

1. Any operation other than emergency operation, maintenance and testing, emergency demand response and operation in non-emergency situations (*up to*) 50 hours per year is prohibited.
2. There is no time limit on the use of emergency stationary RICE in emergency situations.
3. You may operate your emergency stationary RICE up to 100 combined hours per calendar year for maintenance checks and readiness testing. See 40 CFR 63.6640(f)(2) for additional information and restrictions.
4. You may operate your emergency stationary RICE up to 50 hours per calendar year for non-emergency situations, but those 50 hours are counted toward the 100 hours of maintenance and testing. Except as provided in 40 CFR 63.6640(f)(4)(i) and (ii), the 50 hours per year for non-emergency situations cannot be used for peak shaving, or to generate

income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

Recordkeeping Requirements 40 CFR 63.6655

1. Keep records of the maintenance conducted on the stationary RICE.
2. Keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. Document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. See 40 CFR 63.6655(f) for additional information.

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

1. An initial notification is not required per 40 CFR 63.6645(a)(5)
2. A report may be required for failure to perform the work practice requirements on the schedule required in Table 2d. (See Footnote 2 of Table 2d for more information.)

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

Operating Limits

- A. The number of hours this unit shall operate shall not exceed 500 hours per 12 month rolling period.
- B. This unit shall be fired by fuel oil #1 or #2 only.
- C. The sulfur content of any fuel used in this unit shall not exceed 0.05% by weight.

Authority for Requirement: DNR Construction Permit 06-A-056P

Reporting and Recordkeeping

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

- A. The owner or operator shall record the number of hours this unit is operated, in hours. Calculate and record monthly and 12 month rolling totals.
- B. The owner or operator shall record the sulfur content of any fuel used in this unit, in weight percent.

Authority for Requirement: DNR Construction Permit 06-A-056P

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 8
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (acfm): 514
Exhaust Temperature (°F): 1000
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-056P

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 26

Associated Equipment

Associated Emission Unit ID Numbers: EU 26

Emissions Control Equipment ID Number: N/A

Emission Unit vented through this Emission Point: EU 26

Emission Unit Description: Emergency Fire Pump

Raw Material/Fuel: Diesel Fuel

Rated Capacity: 130 HP

Applicable Requirements

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

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

Pollutant: Opacity

Emission Limit(s): 40%

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

DNR Construction Permit 07-A-1291

Pollutant: Particulate Matter (PM₁₀)

Emission Limit(s): 0.29 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1291

Pollutant: Particulate Matter (PM)

Emission Limit(s): 0.29 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1291

Pollutant: Sulfur Dioxide (SO₂)

Emission Limit(s): 2.5 lb/MMBtu

Authority for Requirement: 567 IAC 23.3(3)

DNR Construction Permit 07-A-1291

Pollutant: Nitrogen Oxides (NO_x)

Emission Limit(s): 4.03 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1291

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 0.32 lb/hr

Authority for Requirement: DNR Construction Permit 07-A-1291

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.87 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1291

NSPS Emission Limits

Pollutant: Particulate Matter (PM, filterable only)
Emission Limit(s): 0.8 g/kW-hr
Authority for Requirement: 40 CFR §60.4200 Subpart III
DNR Construction Permit 07-A-1291

Pollutant: Nitrogen Oxides (NO_x) + non-Methane Hydrocarbons (NMHC)
Emission Limit(s): 10.5 g/kW-hr
Authority for Requirement: 40 CFR §60.4200 Subpart III
DNR Construction Permit 07-A-1291

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.0 g/kW-hr
Authority for Requirement: 40 CFR §60.4200 Subpart III
DNR Construction Permit 07-A-1291

Pollutant: Fuel Sulfur Requirements beginning 10/01/2007
Emission Limit(s): Max 500 ppm sulfur and
Min Cetane index=40 or
Max Aromatic content=35%_{vol}
Authority for Requirement: 40 CFR §80.510(a)
DNR Construction Permit 07-A-1291

Pollutant: Fuel Sulfur Requirements beginning 10/01/2010
Emission Limit(s): Max 15 ppm sulfur and
Min Cetane index=40 or
Max Aromatic content=35%_{vol}
Authority for Requirement: 40 CFR §80.510(b)
DNR Construction Permit 07-A-1291

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

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

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

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

This emission unit is subject to NSPS subpart IIII: Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines* (40 CFR §60.4200 through §60.4219) and to the applicable provisions of NSPS Subpart A- *General Provisions* (40 CFR §60.1 through 40 CFR §60.19) and is also subject to the requirements of 567 IAC 23.1(2)"yyy".

Authority for Requirement: DNR Construction Permit 07-A-1291
40 CFR Part 60 Subpart IIII
567 IAC 23.1(2)"yyy"

Operating Limits

- A. The fire pump engine shall be fired by diesel fuel only.
- B. The sulfur content of any diesel fuel used in the fire pump engine shall not exceed 0.05% by weight.
- C. The fire pump shall operate no more than 500 hours per 12-month rolling period.
- D. Per 40 CFR §60.4211, owners and operators of emergency engines meeting standards under §60.4205, but not §60.4204, any operation other than emergency operation, and maintenance and testing is prohibited.
- E. The owner or operator shall meet the fuel requirements specified in 40 CFR §60.4207.
 - 1. Beginning October 1, 2007, diesel fuel fired in the diesel fire pump shall be limited to a maximum sulfur content of 500 ppm and minimum cetane index of 40 or a maximum aromatic content of 30 percent by volume per 40 CFR §80.150(a).
 - 2. Beginning October 1, 2010, diesel fuel fired in the diesel fire pump shall be limited to a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 40 percent by volume per 40 CFR §80.150(b).
 - 3. Per 40 CFR §60.4207, owners and operators of pre-2011 model year diesel generators subject to NSPS Subpart IIII may petition the Administrator for approval to use remaining non-compliance fuel that does not meet the fuel requirements of 40 CFR §80.510(a) or §80.510(b) beyond the dates required, for the purpose of using up existing fuel inventories.
- F. Per 40 CFR §60.4209, the owner or operator shall meet the monitoring requirements specified in 40 CFR 60.4207 and install a non-resettable hour meter prior to startup of the fire pump engine.

Authority for Requirement: DNR Construction Permit 07-A-1291

Reporting and Recordkeeping

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

- A. Record the sulfur content of any fuel used in fire pump engine in weight percent.
- B. Record the number of hours the fire pump engine is operated each month and the reason fire pump was operated. Calculate and record 12-month rolling totals.
- C. The owner or operator shall complete all recordkeeping and monitoring as required by NSPS Subpart III.
 - 1. The owner or operator of the fire pump shall follow the monitoring requirements of 40 CFR §60.4209.
 - 2. The owner or operator of the fire pump shall follow the monitoring requirements of 40 CFR §60.4211.
 - 3. The owner or operator of the fire pump shall follow the notification, reporting, and recordkeeping requirements of 40 CFR §60.4214(b).

Authority for Requirement: DNR Construction Permit 07-A-1291

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 8

Stack Opening, (inches, dia.): 5

Exhaust Flow Rate (scfm): 240

Exhaust Temperature (°F): 1076

Discharge Style: Vertical Unobstructed

Authority for Requirement: DNR Construction Permit 07-A-1291

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F90

Associated Equipment

Associated Emission Unit ID Numbers: EU F90

Emissions Control Equipment ID Number: N/A

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

Emission Unit vented through this Emission Point: EU F90

Emission Unit Description: VOC Emissions from Equipment Leaks

Raw Material/Fuel: VOC

Rated Capacity: N/A

Applicable Requirements

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

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

Pollutant: Volatile Organic Compounds (VOC)

Emission Limit(s): 8.75 tons/yr

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Pollutant: Acetaldehyde (HAP)

Emission Limit(s): 9.4 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Pollutant: Acrolein (HAP)

Emission Limit(s): 9.4 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Pollutant: Formaldehyde (HAP)

Emission Limit(s): 9.4 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Pollutant: Methanol (HAP)

Emission Limit(s): 9.4 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Pollutant: Total HAP

Emission Limit(s): 24.4 tons/yr ⁽¹⁾

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

⁽¹⁾Plant-wide Limits

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

This emission point is subject to NSPS subpart VV - Standards of Performance for *Equipment Leaks of VOC In the Synthetic Organic Chemicals Manufacturing Industry* for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006.

Authority for Requirement: DNR Construction Permit 05-A-384P-S1
40 CFR Part 60 Subpart VV
567 IAC 23.1(2)"nn"

This emission point is also subject to NSPS subpart A - *General Provisions*.

Authority for Requirement: 40 CRF Part 60 Subpart A
567 IAC 23.1(2)

Operating Limits

- A. The owner or operator shall document the number and type of all equipment, as defined in NSPS Subpart VV 40 CFR 60.481, at this plant.
- B. The owner or operator shall follow the applicable standards of NSPS Subpart VV, 40 CFR 60.480 through 60.489.

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Reporting and Recordkeeping

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

- A. The owner or operator shall maintain records of the VOC emissions from all equipment, as defined in NSPS Subpart VV 40 CFR 60.481, plant-wide and update the twelve-month rolling total on a monthly basis. Emission factors shall be based on EPA document 453-R-95-017 titled Protocol for Equipment Leak Emission Estimates. The plant shall use best LDAR methodology.
- B. The owner or operator shall maintain records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.

Authority for Requirement: DNR Construction Permit 05-A-384P-S1

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP F100

Associated Equipment

Associated Emission Unit ID Numbers: EU F100
Emissions Control Equipment ID Number: N/A
Emissions Control Equipment Description: Periodic Sweeping

Emission Unit vented through this Emission Point: EU F100
Emission Unit Description: Plant Haul Roads
Raw Material/Fuel: Fugitive Dust
Rated Capacity: 86,607 VMT/yr

Applicable Requirements

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

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

Pollutant: Particulate Matter (PM₁₀)
Emission Limit(s): 4.6 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-055P

Pollutant: Particulate Matter (PM)
Emission Limit(s): 23.57 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-055P

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"

Operational Limits & Requirements

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

Operating Limits

A. All internal paved haul roads shall be swept at least once a week, weather permitting.

Authority for Requirement: DNR Construction Permit 06-A-055P

Reporting and Recordkeeping

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

- A. The owner or operator shall record the frequency of sweeping for each road section. If sweeping does not occur due to weather, the circumstances shall be recorded.

Authority for Requirement: DNR Construction Permit 06-A-055P

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 Numbers: EP T60a and EP T60b

Associated Equipment

Associated Emission Unit ID Numbers: EU T60a, EU T60b
Emissions Control Equipment ID Number: CE C60a, CE C60b
Emissions Control Equipment Description: Internal Floating Roof

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity (gallons)
EP T60a	EU T60a	Final Product Storage Tank	Ethanol	1,000,000
EP T60b	EU T60b	Final Product Storage Tank	Ethanol	1,000,000

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Single HAP

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

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1

Pollutant: Total HAP

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

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

These emission units are subject to 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* of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Operating Limits

- A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1) and inspect as required in 40 CFR 60.113b(a).
- B. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.
- C. These tanks shall be used to store only denatured ethanol or undenatured ethanol.
- D. A maximum of 150 million gallons of ethanol (denatured and undenatured) shall be produced, plant-wide, per twelve-month rolling period.

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1

Reporting and Recordkeeping

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

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.
- C. The owner or operator shall keep records for Subpart VV as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
- D. The owner or operator shall maintain records of the amount of ethanol (denatured and undenatured) produced, plant-wide, and determine the twelve-month rolling total on a monthly basis.

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 36

Stack Opening, (inches, dia.): NA

Exhaust Flow Rate (scfm): Working/Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: NA

Authority for Requirement: DNR Construction Permits 07-A-438P-S1, 07-A-439P-S1

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Numbers: EP T61 and EP T62

Associated Equipment

Associated Emission Unit ID Numbers: EU T61, EU T62
Emissions Control Equipment ID Number: CE C61, CE C62
Emissions Control Equipment Description: Internal Floating Roof

Emission Point	Emission Units vented through this Emission Point	Emission Unit Description	Raw Material/Fuel	Rated Capacity (gallons)
EP T61	EU T61	Final Product Storage Tank	Ethanol	750,000
EP T62	EU T62	Final Product Storage Tank	Ethanol	750,000

Applicable Requirements

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

The emissions from each emission point listed in this section shall not exceed the levels specified below.

Pollutant: Single HAP

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

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3

Pollutant: Total HAP

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

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

These emission units are subject to 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* of the New Source Performance Standards (NSPS).

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Operating Limits

- A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1) and inspect as required in 40 CFR 60.113b(a).
- B. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.
- C. This tank shall be used to store only denatured ethanol or undenatured ethanol.
- D. A maximum of 150 million gallons of ethanol (denatured and undenatured) shall be produced, plant-wide, per twelve-month rolling period.

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3

Reporting and Recordkeeping

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

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the source.
- B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.
- C. The owner or operator shall keep records for Subpart VV as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
- D. The owner or operator shall maintain records of the amount of ethanol (denatured and undenatured) produced, plant-wide, and determine the twelve-month rolling total on a monthly basis.

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3

Emission Point Characteristics

These emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 50

Stack Opening, (inches, dia.): 4 x 5, each, (4 total)

Exhaust Flow Rate (scfm): Working/Breathing Loss

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permits 03-A-608P-S3, 03-A-609P-S3

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

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes No

Facility Maintained Operation & Maintenance Plan Required? Yes No

Compliance Assurance Monitoring (CAM) Plan Required? Yes No

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP T63

Associated Equipment

Associated Emission Unit ID Numbers: EU T63
Emissions Control Equipment ID Number: CE C63
Emissions Control Equipment Description: Internal Floating Roof

Emission Unit vented through this Emission Point: EU T63
Emission Unit Description: 200 Proof Ethanol Storage Tank
Raw Material/Fuel: Ethanol
Rated Capacity: 100,000 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.

There are no applicable emission limits at this time.

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

This emission point is subject to NSPS Subpart Kb: Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction or Modification Commenced After July 23, 1984.

Authority for Requirement: DNR Construction Permit 03-A-610P-S2
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

This emission point is also subject to NSPS Subpart A – General Provisions.

Authority for Requirement: 567 IAC 22.108(3)
567 IAC 23.1(2)"ddd"

Operating Limits

- A. This tank shall only store ethanol.
- B. A maximum of 150 million gallons of 200 proof ethanol shall be produced, plant wide, per twelve-month rolling period.
- C. The owner or operator shall follow the applicable standards of NSPS Subpart Kb, 40

CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Authority for Requirement: DNR Construction Permit 03-A-610P-S2

Reporting and Recordkeeping

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

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the storage vessel.
- B. The owner or operator shall maintain records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.
- C. The owner or operator shall maintain records of the amount of 200 proof ethanol produced plant wide, and update the twelve-month rolling total on a monthly basis.

Authority for Requirement: DNR Construction Permit 03-A-610P-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 4 total, 4 x 5, each

Exhaust Flow Rate (scfm): Displacement Air

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 03-A-610P-S2

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

Authority for Requirement: DNR Construction Permit 03-A-610P-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: EP T64

Associated Equipment

Associated Emission Unit ID Numbers: EU T64
Emissions Control Equipment ID Number: CE C64
Emissions Control Equipment Description: Internal Floating Roof

Emission Unit vented through this Emission Point: EU T64
Emission Unit Description: Denaturant Storage Tank
Raw Material/Fuel: Denaturant
Rated Capacity: 100,000 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.

There are no applicable emission limits at this time.

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

This emission point is subject to NSPS Subpart Kb: Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction or Modification Commenced After July 23, 1984.

Authority for Requirement: DNR Construction Permit 03-A-611P-S2
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

This emission point is also subject to NSPS Subpart A – General Provisions.

Authority for Requirement: 567 IAC 22.108(3)
567 IAC 23.1(2)"ddd"

Operating Limits

- A. This tank shall only store denaturant.
- B. A maximum of 7.5 million gallons of denaturant shall be used, plant wide, per twelve-month rolling period.
- C. The owner or operator shall follow the applicable standards of NSPS Subpart Kb, 40

CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a).

Authority for Requirement: DNR Construction Permit 03-A-611P-S2

Reporting and Recordkeeping

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

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the storage vessel.
- B. The owner or operator shall maintain records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.
- C. The owner or operator shall maintain records of the amount of denaturant used plant wide, and update the twelve-month rolling total on a monthly basis.

Authority for Requirement: DNR Construction Permit 03-A-611P-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30

Stack Opening, (inches, dia.): 4 total, 4 x 5, each

Exhaust Flow Rate (scfm): Displacement Air

Exhaust Temperature (°F): Ambient

Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 03-A-611P-S2

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

Authority for Requirement: DNR Construction Permit 03-A-611P-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: EP T65

Associated Equipment

Associated Emission Unit ID Numbers: EU T65
Emissions Control Equipment ID Number: CE C65
Emissions Control Equipment Description: Internal Floating Roof

Emission Unit vented through this Emission Point: EU T65
Emission Unit Description: 190 Proof Ethanol Storage Tank
Raw Material/Fuel: Ethanol
Rated Capacity: 100,000 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.

There are no applicable emission limits at this time.

Operational Limits & Requirements

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

NSPS and NESHAP Applicability

This emission point is subject to NSPS Subpart Kb: Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction or Modification Commenced After July 23, 1984.

Authority for Requirement: DNR Construction Permit 03-A-612P-S2
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

This emission point is also subject to NSPS Subpart A – General Provisions.

Authority for Requirement: 567 IAC 22.108(3)
567 IAC 23.1(2)"ddd"

Operating Limits

- A. This tank shall only store ethanol.
- B. The owner or operator shall follow the applicable standards of NSPS Subpart Kb, 40 CFR 60.112b(a)(1), and inspect as required in 40 CFR 60.113b(a)

Authority for Requirement: DNR Construction Permit 03-A-612P-S2

Reporting and Recordkeeping

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

- A. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel for the lifetime of the storage vessel.
- B. The owner or operator shall maintain records as required in 40 CFR 60.115b(a) and 40 CFR 60.116b.

Authority for Requirement: DNR Construction Permit 03-A-612P-S2

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 30
- Stack Opening, (inches, dia.): 4 total, 4 x 5, each
- Exhaust Flow Rate (scfm): Displacement Air
- Exhaust Temperature (°F): Ambient
- Discharge Style: Horizontal

Authority for Requirement: DNR Construction Permit 03-A-612P-S2

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

Authority for Requirement: DNR Construction Permit 03-A-612P-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)

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

Appendices

Appendix A Weblinks to Standards

- A. 40 CFR Part 60 Subpart A- *General Provisions*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.a>
- B. 40 CFR Part 60 Subpart Db- Standards of Performance for *Industrial, Commercial, Institutional Steam Generating Units*
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.d_0b
- C. 40 CFR Part 60 Subpart Kb- Standards of Performance for *Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels)* for Which Construction, Reconstruction or Modification Commenced After July 23, 1984
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.k_0b
- D. 40 CFR Part 60 Subpart VV- Standards of Performance for *Equipment Leaks of VOC In the Synthetic Organic Chemicals Manufacturing Industry* for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.vv>
- E. 40 CFR Part 60 Subpart IIII- Standards of Performance for *Stationary Compression Ignition Internal Combustion Engines*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.7.60.iiii>
- F. 40 CFR Part 63 Subpart A – *General Provisions*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.10.63.a>
- G. 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines*
<http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.14.63.zzzz>

Appendix B
Administrative Consent Order 2015-AQ-06

**IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER**

IN THE MATTER OF: GOLDEN GRAIN ENERGY, LLC	ADMINISTRATIVE CONSENT ORDER NO. 2015-AQ-06
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TO: Golden Grain Energy, LLC
Chad Kuhlers, Chief Operations Officer
1822 43rd Street SW
Mason City, Iowa 50401

Golden Grain Energy, LLC
Christy Marchand, Registered Agent
1822 43rd St. S.W.
Mason City, IA 50401

I. SUMMARY

This administrative consent order is entered into between the Iowa Department of Natural Resources (DNR) and Golden Grain Energy, LLC (Golden Grain) for the purpose of resolving air quality violations. In the interest of avoiding litigation, the parties have agreed to the provisions below.

Any questions regarding this order should be directed to:

Relating to technical requirements:

Brian Hutchins
Iowa Department of Natural Resources
Air Quality Bureau
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324
Phone: 515-725-9550

Relating to legal requirements:

Anne Preziosi, Attorney for the DNR
Iowa Department of Natural Resources
7900 Hickman Road, Suite 1
Windsor Heights, Iowa 50324
Phone: 515-281-6243

Payment of penalty to:

Director of the Iowa DNR
Wallace State Office Building
502 East Ninth Street
Des Moines, Iowa 50319-0034

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

II. JURISDICTION

This administrative consent order is issued pursuant to the provisions of Iowa Code sections 455B.134(9) and 455B.138(1) which authorize the Director to issue any order necessary to secure compliance with or prevent a violation of Iowa Code chapter 455B, Division II (air quality), and the rules promulgated or permits issued pursuant to that part; and Iowa Code section 455B.109 and 567 Iowa Administrative Code (IAC) chapter 10, which authorize the Director to assess administrative penalties.

III. STATEMENT OF FACTS

Description of Facility:

1. Golden Grain is an ethanol production facility located in Mason City, Iowa. Golden Grain employs approximately 48 people and has the capacity to produce 150 million gallons of ethanol per year. The facility began operation in 2004. In addition to ethanol, Golden Grain produces both wet and dry distillers grains as byproducts. Air emission sources at this facility include grain unloading, hammermills, fermenters, cooling towers, dryers, flares, and storage tanks.

Summary of Violations:

2. Golden Grain has violated the provisions of numerous air quality construction permits and its Title V operating permit by (1) exceeding permitted emission limits and failing to properly maintain required records, (2) failing to properly maintain equipment, (3) failing to continuously operate its Predictive Emissions Monitoring System, and (4) failure to continuously monitor thermal oxidizer temperature.

Description of Permits for EP S10a and EP S10b:

3. Golden Grain has exceeded permitted emission limits for Emission Points (EPs) S10a and S10b. Air Quality Construction Permit Nos. 03-A-600P-S4 (EP S10a) and 05-A-780-S2 (EP S10b) were issued to Golden Grain on May 2, 2012. These permits are for two thermal oxidizers associated with Golden Grain's Distillation equipment, DDGS Dryers, and Heat Recovery Boiler at its plant in Mason City. Condition 10a of these permits specifies that NOx emissions shall not exceed 0.04 lbs/MMBtu or 36.62 tons/year. Condition 10b of these permits specifies that acetaldehyde emissions shall not exceed 0.10 lb/hour or 9.4 tons/year. The tons/year limit is a plant wide limit.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

Stack Testing Failures and Adjustment Issues During Stack Testing for EP S10a and EP S10b:

4. In August 2012, stack testing showed that Golden Grain was violating its permitted acetaldehyde limits for EP S10a. On August 15, 2012, Golden Grain conducted stack testing on EP S10a and EP S10b for acetaldehyde. The stack test report, submitted to DNR on September 26, 2012, demonstrated that EP S10a was out of compliance with its permitted emission limit of 0.10 lbs/hr for acetaldehyde. The August 15, 2012, stack test demonstrated that Golden Grain was emitting 0.14 lbs/hr of acetaldehyde. On October 23, 2012, DNR issued a Notice of Violation letter (NOV) to Golden Grain stating that EP S10a was out of compliance with its permitted acetaldehyde emission limit.

5. In May 2013, Golden Grain experienced difficulties in stack testing for EP S10a and EP S10b, indicating that Golden Grain was failing to maintain its control equipment at all times in a manner consistent with good practice for minimizing emissions. Similar deficiencies had been observed by DNR while on site for emission testing conducted on EP S10b in November 2012.

6. On May 8, 2013, Golden Grain conducted stack testing on EP S10a for acetaldehyde. Prior to conducting the May 8, 2013, stack tests, adjustments to control equipment and processes took place over a period of several hours until lower emission rates were observed indicating that the facility would not exceed its emission limits.¹

7. The May 8, 2013, preliminary data observed by DNR prior to stack testing indicated that Golden Grain was out of compliance with its permitted emission limit for acetaldehyde for EP S10a prior to adjustment of process equipment and control equipment.

8. On May 9, 2013, Golden Grain attempted to conduct stack testing on EP S10b for acetaldehyde. Acetaldehyde emissions appeared to be exceeding permitted limits. Again, on May 9th, prior to the testing of EP S10b, adjustments occurred for an extended period of time. Since Golden Grain was unwilling to begin the stack test until preliminary results showed compliance with permitted limits, DNR personnel informed Golden Grain on May 9th that the facility would have to reschedule testing for EP S10b.

Failure to Maintain Process Equipment and Control Equipment for EP S10a and EP S10b:

¹ DNR received the May 8-9, 2013, stack test results on June 21, 2013. On July 26, 2013, DNR sent a letter to Golden Grain stating that the report received June 21, 2013, for the testing conducted May 8, 2013, demonstrated that S10a is in compliance with its permitted acetaldehyde limits. The May 8 testing was conducted following adjustments of process equipment and control equipment.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

9. Based on the issues observed by DNR during the May 8-9, 2013, testing, and similar issues observed on site by DNR during late 2012, DNR determined that Golden Grain would not have been able to show compliance with several of its permitted limits if adjustments to control equipment and processes were not completed immediately prior to conducting the stack tests. DNR issued a May 21, 2013, NOV to Golden Grain for failing to maintain its process equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions. In the May 21, 2013, NOV, DNR required the facility to submit a compliance plan by June 21, 2013.²

10. On June 24, 2013, Golden Grain submitted a response to the May 21, 2013, NOV stating that corrective actions would be taken with respect to EPs S10a and S10b, including replacement of deficient boiler packing for EP S10b during the next planned shutdown in July 2013, to assist in meeting permitted NOx emission limits. The letter stated that EP S10b would then be retested. The letter also stated that if the test failed, then Golden Grain would submit a construction permit application requesting a higher permit limit.

11. Stack testing for EP S10b was rescheduled for September 17, 2013. However, the testing on that date did not occur. Stack testing did occur on January 21 and 22, 2014 and on August 27, 2014. NOx results from these stack tests could not be used to show compliance with the EP S10b applicable permitted NOx limits.³

Predictive Emission Monitoring System Evidence of Permit Violations:

12. Based on Predictive Emission Monitoring System data submitted to DNR by Golden Grain on May 13 and June 11, 2014, Golden Grain exceeded its NOx 0.04 lb/MMbtu permitted emission limits for EP S10b from March 15 through March 16, 2012; from March 21 through May 15, 2012; from October 12 through October 31, 2012; and from August 3 through November 12, 2013.

13. Based on data submitted to DNR by Golden Grain on May 13 and June 11, 2014, Golden Grain exceeded its 12-month rolling average NOx 36.62 ton/year permit limit for EP S10b for the years 2012 and 2013.

Failure to Maintain Process Equipment and Control Equipment for EP S40a, S40b, and S40c:

14. In May 2013, Golden Grain also experienced difficulties in stack testing for EPs S40a, S40b, and S40c, indicating that Golden Grain was failing to maintain its process equipment and control equipment at all times in a manner consistent with good

² Also, in the May 21, 2013, NOV, DNR reminded Golden Grain that EP S10b remained out of compliance with its NOx tons/yr limit.

³ The averaging period of the tests does not correlate with the permitted limits.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

practice for minimizing emissions. Air Quality Construction Permit Nos. 03-A-603P-S3 (EP S40a), 05-A-782P-S1 (EP 40b), 12-A-119 (EP S40c) were issued to Golden Grain on May 2, 2012, for its Fermentation Processes. Condition 10 of all three permits contained an acetaldehyde emission limit.

15. Golden Grain's May 2013, stack testing also included stack testing on EPs S40a, S40b and S40c for acetaldehyde. As with the emissions points discussed above, prior to conducting the May 7-8, 2013, stack tests, adjustments to control equipment and processes took place until lower emission rates were observed indicating that the facility would not exceed its emission limits.

16. Due to the delays and adjustments during the May 7 and 8 stack testing of EPs S40a, S40b, and S40c, these emission points also were included in the May 21, 2013, NOV to Golden Grain for failing to maintain its process equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions. As stated above, in the May 21, 2013, NOV, DNR required the facility to submit a compliance plan by June 21, 2013.

17. Regarding EPs S40a, S40b and S40c, Golden Grain's June 24, 2013, response stated that Golden Grain would implement a new preventative maintenance schedule for EPs S40a, S40b and S40c and have them inspected and cleaned every three months.

18. DNR received the May 7-9, 2013, stack test results on June 21, 2013. On July 26, 2013, DNR sent a letter to Golden Grain stating that the report received June 21, 2013, for the testing conducted May 7-8, 2013, demonstrated that EPs S40a, S40b, S40c are in compliance with their permitted acetaldehyde limits. This testing was conducted following adjustments of process equipment and control equipment.

Failure to Maintain Records:

19. Golden Grain has failed to properly maintain records. DNR conducted an air quality inspection of the Golden Grain facility on May 29, 2013, and found that the 12-month rolling totals were not being maintained for the following parameters and permits: tons of DDGS produced, as required by Air Quality Construction Permit No. 03-A-605P-S2; hours of operation of the Fire Pump, as required by Air Quality Construction Permit No. 06-A-056P; hours of operation of the second Fire Pump, as required by Air Quality Construction Permit No. 07-A-1291; gallons of denaturant used, as required by Air Quality Construction Permit No. 03-A-611P-S2; hours of operation of the Rail Load out Flare, as required by Air Quality Construction Permit No. 08-A-235P-S1; and tons of fugitive VOC emissions for equipment leaks, as required by Air Quality Construction Permit No. 05-A-384P-S1. These records were required by Condition 15 of the named construction permits.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

Predictive Emission Monitoring System Downtime:

20. According to the 3rd and 4th quarter 2013 monitoring reports for EP S10a and EP S10b, Golden Grain has violated its Predictive Emissions Monitoring System requirements. Air Quality Construction Permit Nos. 03-A-600P-S4 (EP S10a) and 05-A-780-S2 (EP S10b) Conditions 12 and 16 require either a Continuous Emissions Monitoring or a Predictive Emissions Monitoring System for NOx. Golden Grain submitted a Predictive Emissions Monitoring System plan to DNR on April 19, 2005, and that plan was approved with modifications in an April 22, 2005, DNR letter to Golden Grain. DNR received the 3rd quarter report for 2013 on October 23, 2013. The report showed significant downtime of the Predictive Emissions Monitoring System for both EP S10a and EP S10b. The downtime reported for the quarter was 12.1% and 27.8% for EP S10a and EP S10b, respectively. In addition, Air Quality Construction Permit No. 03-A-600P-S4 (EP S10a) Condition 15 requires hourly records of the operating temperature of the thermal oxidizer. The temperature monitor for EP S10a was down 7.1% of the operating time for the quarter. DNR issued a December 31, 2013, NOV for the 3rd quarter violations. DNR received the 4th quarter report on February 3, 2014. The report showed downtime of the Predictive Emissions Monitoring System of 10.3% and 5.8% for EP S10a and EP S10b, respectively. In addition, Air Quality Construction Permit No. 03-A-600P-S4 (EP S10a) Condition 15 requires hourly records of the operating temperature of the thermal oxidizer. The thermal oxidizer temperature monitor for EP S10b was down 6.9% of the operating time for the quarter. DNR issued a February 11, 2014, NOV for the 4th quarter violations.

Title V Permit Violations:

21. Golden Grain has violated the provisions of its Title V Operating Permit. Title V Operating Permit 09-TV-002, issued to Golden Grain on March 10, 2009, for its Mason City, Iowa, plant, also contains the requirements stated in the construction permits issued to Golden Grain. Therefore, these construction permit violations also are violations of its Title V operating permit.

History of Past Violations:

22. Golden Grain has a history of past air quality violations. On March 9, 2012, DNR issued Administrative Consent Order 2012-AQ-18 to Golden Grain for exceeding emission limits contained in three air quality construction permits and its Title V operating permit. The three emission points involved in those violations were S10a, S10b, and S70b. The order instructed Golden Grain to pay a Supplemental Environmental Project amount of \$4,312.50 to the Cerro Gordo County Conservation Board and to pay a penalty of \$1,437.50 to DNR.

23. Golden Grain neither admits nor denies the "Statement of Facts" and "Conclusions of Law" contained in this Administrative Consent Order.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

IV. CONCLUSIONS OF LAW

1. Iowa Code section 455B.133 provides for the Environmental Protection Commission (Commission) to establish rules governing the quality of air and emission standards. The Commission has adopted 567 (IAC) chapters 20-35 relating to air quality.

2. 567 IAC 22.1(1) provides that unless exempted in subrule 22.1(2) or to meet the parameters established in paragraph "c" of this subrule, no person shall construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit or permit pursuant to rule 567—22.8(455B), or permits required pursuant to rules 567—22.4(455B), 567—22.5(455B), 567—31.3(455B), and 567—33.3(455B) as required in this subrule. 567 IAC 22.3(3) provides that a construction permit may be issued subject to conditions which shall be specified in writing, and that such conditions may include emission limits, stack testing requirements, and recordkeeping requirements. As set forth in this order, Golden Grain has failed to comply with the requirements of its air quality construction permits by exceeding permitted emission limits, failed to conduct predictive emission monitoring as required by its permits, and failed to keep required records.

3. 567 IAC 24.2(1) requires that the owner or operator of any equipment or control equipment shall maintain and operate its equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions. Golden Grain scheduled required stack testing for five emission points for May 7-9, 2013. However, prior to conducting the stack tests, adjustments to control equipment and processes took place until lower emission rates were observed that would indicate that the facility would not exceed its emission limits. These adjustments occurred for an extended period of time, prompting DNR to require that the testing for EP S10b be rescheduled. In addition, similar problems were observed by DNR while on site for emissions testing attempts conducted in November 2012. These practices indicate that Golden Grain is not maintaining and operating its process equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions.

4. According to the provisions of 567 IAC 22.104, no source may operate after the time that it is required to submit a timely and complete application, except in compliance with a properly issued Title V operating permit. Golden Grain was issued Title V Operating Permit No. 09-TV-002 on March 9, 2009. As stated above, Golden Grain is in violation of the conditions of its Title V Operating Permit.

V. ORDER

THEREFORE, DNR orders and Golden Grain agrees to do the following:

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

1. Golden Grain shall pay a penalty of \$10,000.00 to the DNR within 30 days of the date the Director signs this administrative consent order; and

2. Golden Grain shall comply with the provisions of its air quality construction permits and Title V operating permit in the future; and

3. Golden Grain shall maintain and operate its process equipment and control equipment at all times in a manner consistent with good practice for minimizing emissions; and

4. Within 90 days of the date of this order, Golden Grain shall create and submit to DNR Air Quality Bureau for approval a maintenance plan as described in 567 IAC 24.2(2), which shall include: (1) a written plan that tracks all applicable air quality requirements and deadlines to avoid future noncompliance, and (2) a specific written plan to ensure that EP S10a and EP S10b maintain compliance with permitted emission limits; and

5. To obtain more accurate data regarding nitrogen oxide (NOx) tons per year emission limits, within 45 days of the date of this order, Golden Grain shall create and submit to DNR Air Quality Bureau a written plan, subject to DNR approval, that includes the installation and operation of flow monitors for EP S10a and EP S10b in conjunction with either (a) the existing EP S10a and EP S10b Predictive Emissions Monitoring Systems ("PEMS") or (b) replacement of the PEMS with a Continuous Emissions Monitoring Systems, in compliance with the requirements of 40 CFR 60.48b(c), (d), (e), and (f). Regardless of whether option (a) or (b) is chosen, the plan shall include the installation and operation of flow monitors for EP S10a and EP S10b; and

6. Flow monitors for EP S10a and EP S10b shall be installed and operating as expeditiously as possible but no later than 180 days from the date of the DNR approval set out in paragraph 5 above; and

7. Within 135 days of the DNR approval set out in paragraph 5 above, Golden Grain shall submit (a) a permit applications for the inclusion of a flow monitors for EP S10a and EP S10b to DNR, and (b) any other necessary permit applications. Applications other than the applications for the addition of flow monitors shall include appropriate supporting documentation, including revised BACT analyses, revised modeling analyses, and revised additional impacts analyses. The requested emission limits must not be predicted to cause or contribute to any NAAQS exceedance. In accordance with 567 IAC 22.3(1)"a-d", the permit applications must request conditions adequate to meet all state and federal requirements.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

VI. PENALTY

Iowa Code section 455B.146 authorizes the assessment of civil penalties of up to \$10,000.00 per day of violation for the air quality violations involved in this matter. More serious criminal sanctions are also available pursuant to Iowa Code section 455B.146A.

Iowa Code section 455B.109 authorizes the Commission to establish by rule a schedule of civil penalties up to \$10,000.00 that may be assessed administratively. The Commission has adopted this schedule with procedures and criteria for assessment of penalties through 567 IAC chapter 10. Pursuant to this rule, DNR has determined that the most effective and efficient means of addressing the above-cited violations is the issuance of an administrative consent order with an \$10,000.00 administrative penalty. The administrative penalty assessed by this administrative consent order is determined as follows:

Economic Benefit – 567 IAC chapter 10 requires that the DNR consider the costs saved or likely to be saved by noncompliance. 567 IAC 10.2(1) states that “where the violator received an economic benefit through the violation or by not taking timely compliance or corrective measures, the department shall take enforcement action which includes penalties which at least offset the economic benefit.” Golden Grain has failed to maintain its control equipment at all times in a manner consistent with good practice for minimizing emissions, resulting in permitted limit exceedences and delays in stack testing. In addition, Golden Grain has failed to maintain records and failed to comply with its permit provisions, as required. An estimated cost savings through avoided costs of at least \$2,500.00 has been realized by Golden Grain. Therefore, this amount is assessed for this factor.

Gravity of the Violation – Since the May 2012 issuance of the current permits for EP S10a and EP S10b, Golden Grain has been unable to show consistent compliance with its permitted limits; to maintain and operate its process equipment and control equipment, including its Predictive Emissions Monitoring Systems, at all times in a manner consistent with good practice for minimizing emissions; and to keep the required records. Golden Grain’s consistent inability to comply with these requirements threatens the integrity of the DNR regulatory program. According to data submitted to DNR by Golden Grain on May 13 and June 11, 2014, Golden Grain has exceeded its NOx 0.04 lb/MMbtu permitted emission limit for long periods of time spanning from March 2012 through November 2013. Further, Golden Grain has failed to consistently show compliance with its acetaldehyde emission limits. Acetaldehyde is a toxic air pollutant, and the gravity of the violation is higher when a toxic pollutant is involved. For the reasons stated above, \$4,500.00 is assessed for this factor, with \$1,500.00 assessed for failure to comply with acetaldehyde emission limits, and \$3,000.00 assessed for failure to comply with the remainder of the violations cited in this paragraph.

IOWA DEPARTMENT OF NATURAL RESOURCES
ADMINISTRATIVE CONSENT ORDER
ISSUED TO: GOLDEN GRAIN ENERGY, LLC

Culpability –Administrative Consent Order 2012-AQ-18, which included a penalty assessment, was issued to Golden Grain March 9, 2012, for similar violations, including exceeding the NOx lbs/hr emission limit for EP S10a and EP S10b and the acetaldehyde limit for EP S70b. However, Golden Grain has continued to violate its air quality construction permits and DNR's rules regarding air quality. For this reason \$3,000.00 is assessed for this factor.

VII. WAIVER OF APPEAL RIGHTS

This administrative consent order is entered into knowingly and with the consent of Golden Grain. For that reason, Golden Grain waives its right to appeal this order or any part thereof.

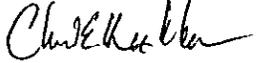
VIII. NONCOMPLIANCE

Failure to comply with this administrative consent order, including failure to timely pay any penalty, may result in the imposition of further administrative penalties or referral to the attorney general to obtain injunctive relief and civil penalties pursuant to Iowa Code section 455B.146. Compliance with Section "V. Order" of this order constitutes full satisfaction of all requirements pertaining to the specific violations described in Section "IV. Conclusions of Law" of this order.



Chuck Gipp, DIRECTOR
Iowa Department of Natural Resources

Dated this 17th day of
June, 2015.



Golden Grain Energy, LLC

Dated this 10th day of
JUNE, 2015.

Facility No. 17-01-100; FO 2; Anne Preziosi; VII.A.2