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-002R2
Expiration Date: January 8, 2028
Permit Renewal Application Deadline: July 8, 2027

EIQ Number: 92-6927
Facility File Number: 17-01-100

Responsible Official
Name: Chad Kuhlers
Title: Chief Executive Officer
Mailing Address: 1822 43rd Street SW, Mason City, IA 50401
Phone #: (641)423-8525

Permit Contact Person for the Facility
Name: Clay Miller
Title: Environmental Health & Safety 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

Marnie Stein 01/09/2023

Marnie Stein, Supervisor of Air Operating Permits Section Date

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Abbreviations

acfm.....actual cubic feet per minute
CFR.....Code of Federal Regulation
CE .....control equipment
CEM.....continuous emission monitor
^{o}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-002R2

Facility Description: Denatured Ethanol Plant (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	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-P7
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-P6
EP S15	EU P15	Grain Unloading, Handling, and Storage	03-A-601-P5
EP S25	EU P25	Grain Unloading Baghouse	20-A-172
EP S30a	EU P30	Hammermill	03-A-602-P2
EP S30b	EU P30b	Hammermill	05-A-781-P
EP S35	EU P35a, EU P35b, EU P35c	2 Hammermills, 1 Surge Bin	12-A-289
EP S40a	EU P40a	Fermentation	03-A-603-P7
EP S40b	EU P40b	Fermentation	05-A-782-P5
EP S40c	EU P40c	Fermentation	12-A-119-S4
EP S70a	EU P70a	DDGS Cooler	03-A-604-P6
EP S70b	EU P70b	DDGS Cooler	05-A-783-P4
EP P80a	EU P80a	Cooling Tower	06-A-054-P
EP P80b	EU P80b	Cooling Tower	05-A-784-P
EP 80c	EU P80c	Cooling Tower	15-A-461-S1
EP 80d	EU P80d	Cooling Tower	15-A-462-S1
EP S90	EU P90	DDGS Loading	03-A-605-P2
EP 22	EU 22, EU 122	Truck Loadout	03-A-607-P8
EP 22b	EU 22b, EU 122b, EU 222b	Rail Loadout	08-A-235-P5
EP 25	EU 25	Emergency Fire Pump	06-A-056-P1
EP 26	EU 26	Emergency Fire Pump	07-A-1291-S1
EP F90	EU F90	VOC Emissions from Equipment Leaks	05-A-384-P3
EP F100	EU F100	Plant Haul Road	06-A-055-P2
EP T60a	EU T60A	Final Product Storage Tank	07-A-438-P3
EP T60b	EU T60B	Final Product Storage Tank	07-A-439-P3
EP T61	EU T61	Final Product Storage Tank	03-A-608-P5
EP T62	EU T62	Final Product Storage Tank	03-A-609-P5
EP T63	EU T63	200 Proof Ethanol Storage Tank	03-A-610-P2
EP T64	EU T64	Denaturant Storage Tank	03-A-611-P2
EP T65	EU T65	190 Proof Ethanol Storage Tank	03-A-612-P2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
IA-01	Corn Oil Recovery System
CI	Corrosion Inhibitor Tank
Office Boiler	Office Boiler
Diesel 1	Diesel Fuel Tank 1
Diesel 2	Diesel Fuel Tank 2
Diesel 3	Diesel Fuel Tank 3
Gas	Gas Tank
Corn Oil 1	Corn Oil Tank 1
Corn Oil 2	Corn Oil Tank 2
Corn Oil 3	Corn Oil Tank 3
Oil Loading	Corn Oil Loadout

II. Plant-Wide Conditions

Facility Name: Golden Grain Energy LLC
Permit Number: 09-TV-002R2

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: January 9, 2023
Ending on: January 8, 2023

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

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

Opacity (visible emissions): 40% opacity
Authority for Requirement: 567 IAC 23.3(2)"d"

Sulfur Dioxide (SO_2): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust: Attainment and Unclassified Areas - A person shall take reasonable precautions to prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be handled, transported or stored or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, with the exception of farming operations or

dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

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

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

Operational Limits & Requirements

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

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 VVa Requirements

The facility is subject to the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. The affected unit is EU F90.
See Appendix for a link to the Standard
Authority for the Requirements: 40 CFR 60 Subpart VVa
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 FFFF
This facility is subject to 40 CFR 63 Subpart FFFF – Miscellaneous Organic Chemical Manufacturing. See permit body for applicable units.
Authority for Requirement: 40 CFR 63 Subpart 63
567 IAC 23.1(4)"cf"

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"

40 CFR 63 Subpart DDDDD
This facility is subject to 40 CFR 63 Subpart DDDDD – Major Source Industrial, Commercial, and Institutional Boilers and Process Heaters. The affected units are EU B10 and EU B.
See Appendix for a link to the Standard.
Authority for Requirement: 40 CFR 63 Subpart DDDDD

III. Emission Point-Specific Conditions

Facility Name: Golden Grain Energy LLC
Permit Number: 09-TV-002R2

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 Description EP S10a: Thermal Oxidizers with Low-NO_X burners and Flue Gas Recirculation (CE C10a)
Emission Control Equipment Description EP S10b: Thermal Oxidizer (CE C10b) with Low-NOx burners (CE C10b.2) and Flue Gas Recirculation (CE C10b.1)

Emission Point	Emission Unit	Emission Unit Description	Raw Material/ Fuel	Rated Capacity	Construction Permit
EP S10a	EU 1	DDGS Dryer 1	Beer, Unfermented Grain Solids, Whole Stillage, DDGS, Natural Gas	42 MMBtu/hr	03-A-600-P7
	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	05-A-780-P6
	EU 4	DDGS Dryer 3		42 MMBtu/hr	
	EU P	Distillation Equipment (3 Tanks and Condenser)		NA	
	EU B	Heat Recovery Boiler		125 MMBtu/hr	

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-P7, 05-A-780-P6

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 4.5 lb/hr; 0.01 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 4.5 lb/hr; 0.01 gr/scf
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 11.13 lb/hr
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6

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-P7, 05-A-780-P6

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 2.75 lb/hr; 98% reduction or 10 ppmv
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6

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-P7, 05-A-780-P6

Other Emission Limits

Pollutant: Particulate Matter (PM) - State
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppm
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6
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-P7, 05-A-780-P6
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

Pollutant: Total HAP
Emission Limit(s): 98% reduction
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6
567 IAC 23.1(3)"cf"
40 CFR 63 Subpart FFFF

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. See Plant-Wide Conditions
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.
    1. 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.
    2. 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 Boilers (EU B, EU 10B) shall not combust any supplemental fuel.
    1. 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.

1. 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 NOx (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.
    1. Calendar date;
    2. The average hourly NOx emission (as NO2) rates measured;
    3. The 30-day average NOx emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
    4. Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rates are in excess of the BACT NOx emission limit, with the reasons for such excess emissions as well as a description of corrective actions taken;
    5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
    6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
    7. Identification of the "F" factor used for calculations, method of determination, and type of fuel combusted;
    8. Identification of the times when the pollutant concentration exceeded full span of the CEMS;
    9. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and
    10. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

H. The owner or operator shall follow the applicable requirements of 40 CFR 63.2460.

I. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525.

Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-P6
567 IAC 23.1(2)"ccc"
40 CFR Part 60 Subpart Db
567 IAC 23.1(3)"cf"
40 CFR 63 Subpart FFFF

NSPS:

Emission units 10B and B are subject to 40 CFR 60 Subpart A – General Conditions and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

NESHAP:
Emission units P50 and P are subject to 40 CFR 63 Subpart A – General Provisions and Subpart FFFF – Miscellaneous Organic Chemical Manufacturing

The Heat Recovery Boilers are subject to 40 CFR 63 Subpart DDDDD – Major Source Industrial, Commercial, and Institutional Boilers and Process Heaters.
Authority for Requirement: 40 CFR 63 Subpart DDDDD

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 (EP S10a), 90 (S10b)
Exhaust Flow Rate (scfm): 100,000
Exhaust Temperature (°F): 300
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permits 03-A-600-P7, 05-A-780-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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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 90^{th} 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-P7, 05-A-780-P5

Stack Testing

Pollutant – Volatile Organic Compounds (VOC)
Stack Test to be Completed by – Once every three years[(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-600-P7, 05-A-780-P6

[(1)] Initial testing completed on August 11 & 12 2020.
[(2)] Subsequent tests shall be at least six (6) months from previous test.

Pollutant – Particulate Matter (PM_{10})
Stack Test to be Completed by – January 8, 2025
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 – January 8, 2025
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** ☐
(Construction permit requirements are equivalent to CAM. Additional CAM Plan not required)

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

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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-601-P5

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.0012 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601-P5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.0012 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601-P5

Other Emission Limits

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.40 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-601-P5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-601-P5
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 maximum amount of grain (corn) received at Golden Grain Energy shall not exceed 1,520,400 tons (54,300,000 bushels) of grain per rolling 12-month period.
B. The grain bins shall be filled only while under negative pressure control. The facility shall maintain the negative pressure control at all times while unloading grain and maintain the negative pressure for a minimum of 15 minutes after unloading is complete.
    a. The owner or operator shall establish procedures to ensure the bin fans are not in operation during loading/unloading operations (i.e., interlock).
C. There shall be no visible emission observed from the entrance or exit of the grain unloading building.
D. Grain receiving that vents to EP S15 shall be conducted within an enclosure. All grain unloading in the building associated with EU P15 shall use choke flow and enclosed dump pits to minimize fugitive dust emissions.
E. The permittee shall inspect and maintain the control equipment, C15, according to the facility's operation and maintenance plan or manufacture's specifications with inspections occurring at a minimum of once per calendar year.

Authority for Requirement: DNR Construction Permit 03-A-601-P5

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 monthly calculate and record the total amount of grain received by the facility.
B. The owner or operator shall monthly calculate and record the twelve-month rolling total amount of grain received by the facility.
C. The permittee shall maintain a log of maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
    1. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    2. Any issues(s) identified during the inspection and the date each issue(s) was resolved; and,
    3. Any issue(s) addressed during maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 03-A-601-P5

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-601-P5

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

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

Stack Testing

Pollutant – Particulate Matter (PM_{10})
Stack Test to be Completed by – January 8, 2024
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 – January 8, 2024
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-601-P5
567 IAC 23.4(7)
Particulate emission limit: PM: 0.0012 gr/dscf; 0.1 gr/dscf
PM_{10}: 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 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 0.10 – 10.0 inches water. 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).	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).

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 recorded 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 recorded daily. The data log includes the observation date, tine, 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: S25

Associated Equipment

Associated Emission Unit ID Numbers: P25
Emissions Control Equipment ID Number: C25
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: P25
Emission Unit Description: Grain Unloading System #2 – Unloading station, Conveyors, 1 Storage Bin
Raw Material/Fuel: Grain
Rated Capacity: 25,000 bushels/hr 2,200,000 bushels

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

NSPS Subpart DD Emission Limits
Pollutant: Opacity
Emission Limit(s): 0%
Authority for Requirement: DNR Construction Permit 20-A-172
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: DNR Construction Permit 20-A-172
567 IAC 23.1(2)"ooo"

Other Emission Limits
Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 20-A-172
567 IAC 23.4(7)

Operational Limits & Requirements

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

A. The maximum amount of grain (corn) received at Golden Grain Energy shall not exceed 1,520,400 tons (54,300,000 bushels) of grain per rolling 12-month period.
    1. The owner or operator shall monthly calculate and record the total amount of grain received by the facility.
    2. The owner or operator shall monthly calculate and record the twelve-month rolling total amount of grain received by the facility.

B. The grain bins shall be filled only while under negative pressure control. The facility shall maintain the negative pressure control at all times while unloading grain and maintain the negative pressure for a minimum of 15 minutes after unloading is complete.
    1. The owner or operator shall establish procedures to ensure the bin fans are not in operation during loading/unloading operations (i.e., interlock)

C. In accordance with, NSPS Subpart DD, 40 CFR §60.302, The owner or operator shall not discharge into the atmosphere any fugitive emission from:
    1. Any individual truck unloading station, railcar unloading station, or railcar loading station, which exhibits greater than 5 percent opacity.
    2. Any grain handing operation which exhibits greater than 0 percent opacity.
    3. Any truck loading station which exhibits greater than 10 percent opacity.

D. The permittee shall inspect and maintain the control equipment, C25, according to the facility's operation and maintenance plan or manufacturer's specifications with inspections occurring at a minimum of once per calendar year.
    1. The permittee shall maintain a log of all maintenance and inspection activities performed on the control equipment. 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; and,
        iii. Any issue(s)addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: 567 IAC 22.108(15)

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 150
Stack Opening, (inches): 38
Exhaust Flow Rate (scfm): 25,725
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 20-A-172

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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
Golden Grain Energy, LLC Ethanol Manufacturing Plant Grain Receiving and Handling Baghouse for PM, PM_{10} and $PM_{2.5}$

I. Background

a. Emission Units

Description:	One (1) grain handling operation #2, identified as grain unloading system #2, with a maximum throughput rate of 25,000 bushels per hour vented to a baghouse for control
Identification:	Grain unloading system #2 vented to baghouse
C25 Emission Source:	Permit 20-A-172; Plant Number 17-01-100
Facility:	Golden Grain Energy, LLC Ethanol Manufacturing Plant Mason City, Iowa 50401

b. Applicable Regulations, Emission Limits and Monitoring Requirements Regulation: 40 CFR 64, Title V Permit

CAM Emission Limits:
0.01 grains per dry standard cubic feet (gr/dscf) total particulate matter (PM)
0.01 gr/dscf of particulate matter < 10 microns (PM_{10})
0.01 gr/dscf of particulate matter < 2.5 microns ($PM_{2.5}$)

c. Control Technology

Fabric filter baghouse for the collection and control of PM, PM_{10} and $PM_{2.5}$.

II. Monitoring Approach

a. Indicator

The selected performance indicators are baghouse module differential pressure and visible emissions.

b. Measurement Approach

The pressure drop will be monitored and recorded at least once each week of operation. Records of these inspections shall be recorded and maintained by the facility.

c. Indicator Range

The pressure drop shall be maintained between 0.1 to 10.0 inches of water column during operation. An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is rejiggered is a 6-minute visible emissions observation (similar to Method 22). Additionally,

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 weather conditions prevent the observer from conducting a visible emissions 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.

d. Quality Improvement Plan (QIP) Threshold

The QIP is 9 excursions in a 6-month reporting period (5 percent). In the event that all bags of the baghouse are replaced simultaneously, the facility will record the date of complete replacement. If the pressure drop is monitored to be below the minimum requirement after a complete simultaneous replacement of bags, the facility shall continue to monitor the source and make a note of the first instance when the pressure drop is above the minimum requirement in order to establish that normal pressure operation has resumed.

e. Performance Criteria

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.
Verification of Operational Status:	Not applicable.
QA/QC Practices and Criteria:	Visible emissions observations are made at the emission point and on the external baghouse unit, system ductwork and associated components. The observer will be trained by Golden Grain Energy, LLC to detect visible emissions.
Monitoring Frequency:	The pressure drop is displayed at all time at the unit. Pressure drop readings shall be recorded 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.

Data Collection Procedures:	Pressure drop is recorded daily. Visible emisisons reading shall be recorded weekly. The daily observation logs include the observation date, time, and pressure drop reading and whether or not the pressure drop was within the range specified in the permit. The weekly observation log includes the observation date, time, and whether or not any visible emissions were observed. These observation lots will be kept a minimum of five (5) years.

III. Justification

a. Background

This facility is a dry mill ethanol manufacturing facility. The facility purchases feedstock (corn or other) which is converted to ethanol via natural fermentation. The final products are sold and include fuel ethanol, animal feed, as dried distiller's grain with solubles (DDGS), modified wetcake or wetcake, and corn oil. Grain receiving and handling operations result in the generation of filterable PM, PM10 and PM2.5 emissions. As such, baghouses to control PM, PM10 and PM2.5 from such operations are employed by the facility to minimize PM, PM10 and PM2.5 emissions.

b. Rationale for Selection of Performance Indicator

Baghouses (or fabric filters) are standard PM, PM10 and PM2.5 emission controls from grain processing operations creating particulate emissions and are typically cited as best available control technology (BACT) for such applications. Baghouses operate by collecting PM, PM10, and PM2.5 emissions on porous fabric bags, thus resulting in a pressure differential across the system. The pressure is required as the gas stream is passed through the fabric which results in pressure; too much pressure indicates a possible plugging of the system and too little indicates possible bag breakage. Therefore, pressure drop of the system is an ideal indicator of baghouse performance. Visible emissions from the stack indicate a potential issue with the control equipment, such as bag breakage, and are therefore also indicators for baghouse performance.

c. Rationale for Selection of Indicator Level

Baghouses remove dust from a gas stream by passing the stream through a porous fabric. Particles from a porous cake on the fabric that acts as the filtration device. This porous cake is routinely removed and collected the returned to the manufacturing process. Baghouses are highly efficient for controlling filterable PM, PM_{10} and $PM_{2.5}$ and are typically considered BACT for such applications with control efficiencies from 97 to 99 percent of more in most applications. The baghouse manufacturer guaranteed a control efficiency of 99% for this source. Baghouses are subject to failure if they are not properly operated and maintained. All excursions will be documented. An indicator pressure drop range of 0.1 to 10.0 inches of water column is recommended to achieve the required control efficiency. Abnormal visible emissions shall also be an indicator for excursions from this CAM plan.

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	Emission Unit Description	Raw Material/ Fuel	Rated Capacity (tons/hr)	Construction Permit
EP S30a	EU P30	Hammermill and Corn Day Bin	Grain	70	03-A-602-P2
EP S30b	EU P30B	Hammermill		70	05-A-781-P

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-602-P2, 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 (PM_{10})
Emission Limit(s): 0.41 lb/hr, 1.8 tons/yr, 0.003 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-602-P2, 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-602-P2, 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.

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-602-P2, 05-A-781P

Emission Point Characteristics
Each 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-602-P2, 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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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

Stack Testing

Pollutant – Particulate Matter (PM_{10}) [(1)]
Stack Test to be Completed by – January 8, 2024
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 – January 8, 2024
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-602-P2,05-A-781P
567 IAC 23.4(7)
Particulate emission limit: PM/PM_{10}: 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 0.10 – 10.0 inches water. 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).	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).

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, tine, 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

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

Pollutant: Particulate Matter (PM_{10})
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.

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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 30 days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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

Stack Testing:
Pollutant – Particulate Matter (PM)
Stack Test to be Completed by – January 8, 2024
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

Stack Testing:

Pollutant - Particulate Matter (PM_{10})
Stack Test to be Completed by – January 8, 2024
Test Method – 40 CFR 51, Appendix M, 201A with 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 S35 Baghouses

I. Background

A. Emissions Unit
Description: Hammermilling Baghouses
Identification: EU P35a, EU P35b, EU P35c
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
PM_{10}: 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 0.10 – 10.0 inches water. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute	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).

	visible 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, tine, 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

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Emission Point	Emission Units	Emission Unit Description	Raw Material/ Fuel	Rated Capacity (gal/hr)	Construction Permit
EP S40a	EU P40a	Fermentation – 11 Process Vessels, Beer Well	Grain Slurry/Yeast/Beer	17,857	03-A-603-P7
EP S40b	EU P40b	Fermentation – 11 Process Vessels, Beer Well		17,857	05-A-782-P5
EP S40c	EU P40c	Fermentation – 11 Process Vessels, Beer Well		17,857	12-A-119-S4

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
Authority for Requirement: DNR Construction Permits 03-A-603-P7, 05-A-782-P5

Emission Limit for EP S40c Only

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.1 lb/hr
Authority for Requirement: DNR Construction Permit 12-A-119-S4

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-P7, 05-A-782-P5, 12-A-119-S4

[(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: Total HAP
Emission Limit(s): 95% reduction
Authority for Requirement: DNR Construction Permits 03-A-603-P7, 05-A-782-P5, 12-A-119-S4
567 231(3)"cf"
40 CFR 63 Subpart FFFF

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. For each month of operation, the facility shall operate the scrubbers according to the parameters (scrubber liquid flow rate, additive feed rate and chiller liquid temperature) that it established during the seasonal performance testing required by the stack testing requirements to demonstrate compliance with the permitted emission limits found in the "Emission Limits" section.

Permitted Monthly Scrubber Operating Parameters as Allowed by Season Tested

Season Tested	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Summer (testing shall be conducted in June, July or August)	X	X	X	X	X	X	X	X	X	X	X	X
Winter (testing allowed in any month from October through April	X	X	X	X						X	X	X

B. The Fermentation Scrubbers (C40a, C40b, & C40c) shall maintain an average pressure drop across each 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 each 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

C. Each scrubber shall have a minimum scrubber liquid flow rate that is at least 90% of the average liquid flow rate, at the inlet to the wet scrubber, as measured during the most recent performance test for the applicable calendar month that demonstrated compliance with all applicable emission limits. Compliance with the liquid 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 liquid 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 liquid 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 average liquid flow rate observed during the applicable seasonal performance test), then the facility shall record the time, date and actions taken to correct the situation and when the flow rate is back above the minimum flow rate required.

c) The facility shall record the permitted scrubbing liquid flow rate it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance

ii. During periods of startup or shutdown, the liquid flow rate shall be maintained at 90 percent of the total liquid flow rate at the inlet to each wet scrubber measured during the applicable seasonal 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.

D. Any additive added to the scrubber liquid during a compliance test to enhance the efficiency of the scrubbers shall be added, for that month, at a rate greater than or equal to the rate recorded during the applicable seasonal operating 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 additive feed rate deviates below the feed rate required (i.e., average additive feed rate observed during the applicable seasonal performance test), then the facility shall record the time, date and actions taken to correct the situation and when the additive feed rate is back above the minimum rate required.

c) The facility shall record the permitted additive feed rate it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance.

ii. During periods of startup or shutdown, the chemical addition rate shall be maintained at rate greater than or equal to the rate recorded during the applicable seasonal 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. If a chiller (heat exchanger) is used to cool the scrubber liquid (water) during a compliance test to enhance the efficiency of the scrubber the temperature of the chiller water shall not be greater than 10ºF above the average temperature recorded during the applicable seasonal operating performance test that demonstrated compliance with all applicable emission limitations. Compliance shall be based on a 24-hour block average.

i. The owner or operator shall collect and record the chiller water temperature, at a minimum of once every 30 minutes. On those days when there is an alarm for the chiller water temperature, the owner or operator shall calculate and record the average chiller water temperature based on a 24-hour block average.

ii. If the chiller water temperature exceeds the temperature observed during the most recent seasonal performance test (that demonstrated compliance) by greater than 10ºF (based on a 24-hour block average), then the facility shall record the time, date and actions taken to correct the situation and when the parameter is less than 10ºF above the permitted average chiller water temperature for that seasonal operating scenario.

iii. The facility shall record the permitted chiller water temperature it is utilizing for each month as determined during the most recent seasonal performance test that it is using to demonstrate compliance.

F. The requirements in B. – E. shall not apply on days that the scrubbers or the equipment the scrubbers control are not in operation.

G. Maintain onsite a copy of the previous performance tests for each scrubber seasonal operating scenario detailing scrubber pressure drop, scrubber liquid flow rate, additive feed rate, and chiller water temperature (if applicable) measured during each performance test, which demonstrated compliance with BACT and Emission Limits.

H. Decreased Production Operations

i. The facility shall collect and record the liquefaction flow rate, at a minimum, of once every hour.

a) During periods of decreased production operation and in preparation for scrubber shutdown, the facility shall establish an initial liquefaction flow rate reference point and start time of decreased production. The liquefaction flow rate reference point shall not exceed 110% of the average liquefaction flow rate, as measured during the most recent performance test for the applicable calendar month.

b) During periods of decreased production operation, once the pressure drop is less than the value recorded during the applicable seasonal performance test that demonstrated compliance and the liquefaction flow rate has decreased by a minimum of 33% from the reference point, the facility may shutdown one of the three scrubbers (CE C40a, CE C40b, and CE C40c).

c) During periods of decreased production operation, once the pressure drop is less than the value recorded during the applicable seasonal performance test

that demonstrated compliance and the liquefaction flow rate has decreased by a minimum of 67% from the reference point, the facility may shutdown two of the three scrubbers (CE C40a, CE C40b, and CE C40c).

d) If the liquefaction flow rate or the pressure drop exceed the minimum levels listed above, the facility shall record the time, date and actions taken to correct the situation and when they are back below the minimum levels listed above.

I. The Scrubbers (C40a, C40b, & 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, C40a, C40b, & 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 units and/or control equipment;

b) Any issue(s) identified during the inspection and the date each issues) 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 this section (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.

J. The owner or operator shall follow the applicable requirements of 40 CFR 63.2460.

K. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525.

Authority for Requirement: DNR Construction Permits 03-A-603-P7, 05-A-782-P5, 12-A-119-S4
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

Emission Point Characteristics

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

Emission Point	Stack Height (ft, from ground)	Stack Opening (inches, dia)	Ehxaust Flow Rate (scfm)	Exhaust Temperature (°F)	Discharge Style
S40a	58	20	5,100	75	Vertical, unobstructed
S40b	57	20	5,100	75	Vertical, unobstructed
S40c	61	20	5,100	75	Vertical, unobstructed

Authority for Requirement: DNR Construction Permits 03-A-603-P7, 05-A-782-P5, 12-A-119-S4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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 (Required for S40a, S40b, & S40c)

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)

Stack Testing

For EP S40a, EP S40b, & 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-P7, 05-A-782-P5, 12-A-119-S4

(1) The facility shall conduct compliance testing on this emission point for the qualifying seasonal period covering the months of May through September (summer), as described in Operating Requirements and Associated Recordkeeping on an alternating schedule as described below. Stack testing shall be conducted during the months of June, July, or August for the summer period. The facility shall use those tests that demonstrate compliance with the permitted emission limits in Emission Limitations to establish the scrubber liquid flow rate, additive feed rate and, chiller water temperature (if a chiller is used to control scrubbing water temperature) for each month of operation, as detailed in Operating Requirements and Associated Recordkeeping.

(2) Should the facility elect to operate the scrubber system using winter operating parameters, the facility shall conduct stack testing on this emission point for the qualifying seasonal period covering the months of October through April (winter), as described in Operating Requirements and Associated Recordkeeping on an alternating schedule as described herein. If the facility opts to comply with only the operating parameters established during the June, July, or August (summer) testing, the additional winter test is not required. The facility shall alternate the testing of these seasonal rates on a rotating schedule, so that at a minimum, a seasonal operating rate will be tested once each calendar year. The seasonal testing schedule shall be conducted on a rotation as follows:

- Summer testing, conducted during the months of June through August covering the period of May 1 through September 30, is performed at least twice in a three (3) year (calendar) block.
- Winter testing, conducted at any point throughout the year covering the period of October 1 through April 30, is performed at least once in a three (3) year (calendar) block.

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** ☐
(C40a, C40b, & C40c qualify for CAM plans for VOC's. The construction permit requirements contain requirements equivalent to CAM, so additional CAM plans are not required)

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
Raw Material/Fuel: DDGS
Rated Capacity: 27.5 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 (PM_{10})
Emission Limit(s): 3.94 tons/yr, 0.003 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.94 tons/yr, 0.003 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.30 lb/hr, 14.45 tons/yr
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

Other Emission Limits

Pollutant: Opacity
Emission Limit(s): 0% [(1)]
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permits 03-A-604-P6, 05-A-783-P4

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.90 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

Pollutant: Single HAP [(2)]
Emission Limit(s): 1.07 lb/hr
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

Pollutant: Total HAP
Emission Limit(s): 2.78 lb/hr
Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

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 conduct an inspection of the emission units and associated control equipment at a minimum of once per year and correct/ repair any issues discovered during the inspection.

Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

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 log of all inspections and maintenance activities performed on the emission units and the associated control equipment. This log shall include, but is not necessarily limited to:
    1. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    2. Any issues identified during the inspection and the date each issue was resolved; and,
    3. Any issues addressed during the maintenance activities and the date each issue was resolved.

Authority for Requirement: DNR Construction Permits 03-A-604-P6, 05-A-783-P4

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-604-P6, 05-A-783-P4

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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 (Required for S70a & S70b)

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)

Stack Testing

Pollutant – Particulate Matter (PM_{10})
Stack Test to be Completed by – January 8, 2025
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 – January 8, 2025
Test Method – 40 CFR 60, Appendix A, Method 5
40 CFR 51, Appendix M, Method 202
Authority for Requirement – 567 IAC 22.108(3)

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 (PM_{10})
Emission Limit(s): 1.33 lb/hr, 5.84 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-054-P, 05-A-784-P

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-054-P, 05-A-784-P

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 2,500 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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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

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Emission Unit vented through this Emission Point: EU P80c
Emission Unit Description: Cooling Tower, 8 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%[(1)]
Authority for Requirement: 567 IAC 23.3(2) "d"
DNR Construction Permit 15-A-461-S1

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 1.13 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-461-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.13 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-461-S1

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-S1

Operational Limits & Reporting/Record keeping Requirements

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

Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 5000 parts per million by weight (5000 mg/L) for any single sampling event. The owner or operator shall conduct TDS testing on a quarterly basis. Approved testing includes conductivity testing with a correlation to determine the TDS concentration. 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. The biocide or additive used in the cooling water shall not contain any VOC or HAP compounds. The owner or operator shall maintain copies of the Safety Data Sheet (SDS) of any biocide or additive used in the cooling water.
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. 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:
    1. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    2. Any issue(s) identified during the inspection and the date each issue(s) was resolved;
    3. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
    4. Identification of the staff member performing the inspection or maintenance activity.

Authority for Requirement: DNR Construction Permit 15-A-461-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 35
Stack Opening (feet, diameter): 25 (per cell)
Exhaust Flow Rate (acfm): 1,500,000 (per cell)
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 15-A-461-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department

within 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: Mist 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 (PM_{10})
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)"a"
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).
    1. 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.
    2. 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.
    1. 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.
    2. 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:
        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.

C. The owner or operator shall use no water treatment chemicals that contain chromium compounds.
    1. 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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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-605-P2

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.1 lb/hr, 0.44 tons/yr, 0.0023 gr/dscf
Authority for Requirement: DNR Construction Permit 03-A-605-P2

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-605-P2

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-605-P2

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-605-P2

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-605-P2

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

Emission Point ID Number: EP 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-P8

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.34 tons/yr
Authority for Requirement: DNR Construction Permit 03-A-607-P8

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.34 tons/yr
Authority for Requirement: DNR Construction Permit 03-A-607-P8

Pollutant: Nitrogen Oxides (NO_X)
Emission Limit(s): 1.34 tons/yr
Authority for Requirement: DNR Construction Permit 03-A-607-P8

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 7.3 tons/yr
Authority for Requirement: DNR Construction Permit 03-A-607-P8

Other Emission Limits

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 7.52 tons/ yr
Authority for Requirement: DNR Construction Permit 03-A-607-P8

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 22) 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.
    1. 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).
    1. The owner or operator shall properly maintain equipment used to continuously monitor the flame during ethanol loading.
    2. 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.
    1. The owner or operator shall record and maintain the following monthly records:
        i. The number of hours that the flare was in operation;
        ii. The emissions from the flare for each pollutant for that month;
        iii. The rolling twelve (12) month total of the number of hours that the flare was in operation; and,
        iv. The rolling twelve (12) month total emissions for each pollutant for each month of operation.

D. The flare (CE 22) shall:
    1. 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.
    2. Be operated with a flame present at all times ethanol is loaded.
    3. Be designed to ensure smokeless operation.

E. A maximum of 157.5 million gallons of denatured ethanol may be loaded out, plant-wide, per twelve-month rolling period.
    1. The owner or operator shall maintain monthly records of the amount of denatured ethanol loaded out plant-wide, and update the twelve-month rolling total on a monthly basis.

F. A maximum of 62 million gallons of denatured ethanol may be loaded out by truck, plant-wide, per twelve-month rolling period.
    1. The owner or operator shall maintain monthly records of the amount of denatured ethanol loaded out by truck, plant-wide, and update the twelve-month rolling total

on a monthly basis.

G. The owner or operator shall follow the applicable requirements of 40 CFR 63.2475.

H. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525

Authority for Requirement: DNR Construction Permit 03-A-607-P8
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

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-P8

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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-P5

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 3.7 tons/yr
Authority for Requirement: DNR Construction Permit 08-A-235-P5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 3.7 tons/yr
Authority for Requirement: DNR Construction Permit 08-A-235-P5

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 3.7 tons/yr
Authority for Requirement: DNR Construction Permit 08-A-235-P5

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 13.76 tons/yr
Authority for Requirement: DNR Construction Permit 08-A-235-P5

Other Emission Limits

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.84 tons/yr
Authority for Requirement: DNR Construction Permit 08-A-235-P5

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.
    1. 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. This loadout flare shall be operated no more than 6000 hours per twelve-month rolling period.
    1. The owner or operator shall record and maintain the following monthly records:
        i. The number of hours that the flare was in operation;
        ii. The emissions from the flare for each pollutant for that month;
        iii. The rolling twelve (12) month total of the number of hours that the flare was in operation; and,
        iv. The rolling twelve (12) month total emissions for each pollutant for each month of operation.

C. The flare (CE 22b) shall:
    1. 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.
    2. Be operated with a flame present at all times ethanol is loaded.
    3. Be designed to ensure smokeless operation.

D. A maximum of 157.5 million gallons of denatured ethanol may be loaded out, plant-wide, per twelve-month rolling period.
    1. The owner or operator shall maintain monthly records of the amount of denatured ethanol loaded out plant-wide, and update the twelve-month rolling total on a monthly basis.

E. The owner or operator shall follow the applicable requirements of 40 CFR 63.2475.

F. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525,

Authority for Requirement: DNR Construction Permit 08-A-235-P5
567 IAC 23.1(4)"cf"
40 CFR 63 Subpart FFFF

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-P5

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

BACT Limits
Pollutant: Opacity
Emission Limit(s): 40%
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.42 lb/hr, 0.1 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.39 lb/hr, 0.1 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 5.9 lb/hr, 1.47 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.47 lb/hr, 0.12 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 1.27 lb/hr, 0.32 tons/yr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Additional Emission Limits
Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.42 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-056-P1

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: DNR Construction Permit 06-A-056-P1
567 IAC 23.3(3)"b"

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. This engine is limited to operating a maximum of 500 hours in any rolling 12-month period.

B. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §63.6675. There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition A. is not exceeded.

C. The owner or operator shall maintain the following monthly records:
   1. the total number of hours that the engine operated; and
   2. the rolling 12-month total amount of the number of hours that the engine operated.

D. This engine shall be fired by fuel oil #1 or #2 only.

E. The sulfur content of any fuel used in this engine shall not exceed 0.05% sulfur by weight.

F. The owner or operator shall keep records of the sulfur content (in weight percent) of any fuel used in this engine.

G. The owner or operator shall follow the operating and maintenance requirements of Table 2c in Subpart ZZZZ for Emergency Stationary CI RICE, as required by §63.6602.

H. The owner or operator shall demonstrate compliance and submit reports as required by §63.6640 through §63.6660.

Authority for Requirement: DNR Construction Permit 06-A-056-P1
40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 8
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (acfm): 515
Exhaust Temperature (°F): 1,000
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-056-P1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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%[(1)]
Authority for Requirement: 567 IAC 23.3(2) "d"
DNR Construction Permit 07-A-1291-S1

[(1)]An exceedance of the indicator opacity of 20% 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_{10})
Emission Limit(s): 0.29 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1291-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.29 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1291-S1

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 4.03 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1291-S1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.32 lb/hr
Authority for Requirement: DNR Construction Permit 07-A-1291-S1

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

NSPS and NESHAP Applicability

This emission point is subject to 40 CFR 60 Subparts A – General Provisions and IIII – Stationary Compression Ignition Internal Combustion Engine. The emission standards that the engine must be certified to meet are:

Pollutant	Emission Standard	Basis
Particulate Matter (PM) (filterable only)	0.80 grams/kW-hr[2]	40 CFR §60.4205(c)
NMHC[1] + NOx	10.5 grams/kW-hr [2]	40 CFR §60.4205(c)
Carbon Monoxide (CO)	5.0 grams/kW-hr [2]	40 CFR §60.4205(c)
Fuel Sulfur Requirements beginning 10/01/2010	Max 15 ppm Sulfur and Min Cetane Index = 40 or Max Aromatic content = 35%$_{vol}$	40 CFR §80.510(b)

(1) Non-methane hydrocarbon
(2) Standard is expressed as the average of three test runs

Per 40 CFR §60.4211, the owner or operator has five options for demonstrating compliance with the emission standards specified in 40 CFR §60.4205(c). Those options are:

A. Purchasing an engine certified according to 40 CFR 89 or 40 CFR 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
B. Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in NSPS subpart IIII and these methods must have been followed correctly.
C. Keeping records of engine manufacturer data indicating compliance with the standards.
D. Keeping records of control device vendor data indicating compliance with the standards.
E. Conducting an initial performance test to demonstrate compliance with the NSPS emission standards according to the requirements specified in 40 CFR §60.4212, as applicable.

The emergency engine is subject to 40 CFR 63 Subparts A – General Provisions and ZZZZ - National Emission Standards for Hazardous Air Pollutants for *Stationary Reciprocating Internal Combustion Engines* (RICE). In accordance with §63.6590 (c)(6), the engine must comply with the requirements of Subpart ZZZZ by meeting the requirements of NSPS subpart IIII. No further requirements apply to this engine under Subpart ZZZZ.

Authority for Requirements: 40 CFR Part 63 Subpart ZZZZ
40 CFR Part 60 Subpart IIII
567 IAC 23.1(4)"cz" and 567 IAC 23.1(2)"yyy"
DNR Construction Permit 07-A-1291-S1

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. This engine is limited to operate as an emergency stationary internal combustion engine as defined in §60.4219 and in accordance with §60.4211(f). There is no time limit on the use of the engine in emergency situations provided that the annual hourly limit established in Condition C. is not exceeded. In accordance with §60.4211(f)(2), the engine is limited to operate a maximum of 100 hours per year for maintenance checks and readiness testing.

E. The owner or operator shall maintain the following monthly records:

   1. the number of hours that the engine operated for maintenance checks and readiness testing;
   2. the number of hours that the engine operated for allowed non-emergency operations;
   3. the total number of hours that the engine operated; and
   4. the rolling 12-month total amount of the number of hours that the engine operated.

F. The owner or operator shall maintain the following annual records:

   1. the number of hours that the engine operated for maintenance checks and readiness testing; and.
   2. the total number of hours that the engine operated for maintenance checks and readiness testing.

G. The owner or operator shall meet the fuel requirements specified in 40 CFR§60.4207.

   1. 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 30 percent by volume per 40 CFR§80.510(b).

H. 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-S1
567 IAC 23.1(2)"yyy"
40 CFR 60 Subpart IIII

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): 1,075
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 07-A-1291-S1

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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): 12.11 tons/yr
Authority for Requirement: DNR Construction Permit 05-A-384-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.

NSPS Applicability

This emission point is subject to NSPS subparts A- General Provisions and 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 Supart VVa – Standards of Performance for Equipment Leaks of VOC in Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006.

NESHAP Applicability

This emission point is subject to NESHAP subparts A – General Provisions and Subpart FFFF – Miscellaneous Organic Chemical Manufacturing.

A. The equipment count shall be documented as to the number and types of leak detection and repair (LDAR) program components used including vacuum service components. Components include but are not limited to valves, pumps, compressors, and flanges.

B. The owner or operator shall follow the applicable requirements of NSPS Subpart VV, 40 CFR §60.480 through §60.489 and/or NSPS Subpart VVa, 40 CFR §60.480a through §60.489a.

C. All leaks shall be recorded and included in the calculation of the 12-month rolling total VOC emission rate.

D. This facility shall be divided into three process units, which are defined as the fermentation process unit, the distillation process unit, and the storage process unit. For each, the following shall be completed:

1. Determine the component count for each process unit. This count shall be updated with each modification to that process unit.
2. From each month, determine the VOC emissions over the previous month from each process unit using the calculation methods outlined in EPA's document 453/R-95-017 title Protocol for Equipment Leak Emission Estimates (pages 2-11). Control efficiencies listed in table 5-2 (page 5-9) may be assumed for those components listed.

E. At the end of each month, record the total VOC emissions over the previous month from the plant by adding the emissions total as determined in Condition D.2.

F. At the end of each month, record the total VOC emissions over the previous twelve (12) months as determined in Condition E above.

G. The owner or operator shall keep records as required in 40 CFR 60.486 and/or 40 CFR 60.486a, and reports as required in 40 CFR 60.487 and/or 40 CFR 60.487a.

H. The owner or operator shall keep records and supporting information showing which process units are subject to NSPS Subpart VV and which process units are subject to NSPS Subpart VVa. The facility shall provide a list of the process units, including which NSPS subpart they are subject to, to the Department.

I. The owner or operator shall follow the applicable requirements of 40 CFR 63.2480

J. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525.

Authority for Requirement: DNR Construction Permit 05-A-384-P3
40 CFR Part 60 Subparts A,VV, & VVa
40 CFR Part 63 Subparts A, FFFF
567 IAC 23.1(2)"nn" & 23.1(4)"cf"

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: Dust Suppression (Wet Sweeping)

Emission Unit vented through this Emission Point: EU F100
Emission Unit Description: Plant Haul Roads
Raw Material/Fuel: Fugitive Dust
Rated Capacity: N/A

Applicable Requirements

Emission Limits (lb./hr, gr./dscf, lb./MMBtu, % opacity, etc.)
The emissions from this emission point shall not exceed the levels specified below.

Pollutants: Particulate Matter and PM_{10}
Emission Limit(s): Best Available Control Technology (BACT) is a work practice that consists of the facility using best management practices. See Operational Limits & Reporting/Record keeping Requirements for details.
Authority for Requirement: DNR Construction Permit 06-A-055-P2

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 06-A-055-P2

Pollutant: PM_{10}
Emission Limit(s): 4.62 tons/yr[(2)]
Authority for Requirement: DNR Construction Permit 06-A-055-P2

[(1)] The owner/ operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property.
[(2)] Based on emission calculations for the haul roads. Emission limit based on an average vehicle weight of 27.74 tons, silt content of 1.16 grams per square meter, and a worst-case calculation assuming all grain and denaturant are received by truck, and all distillers grain shipped by truck. See Operational Limits and Reporting/Record keeping Requirements for compliance demonstration with particulate emission limit.

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
A. All haul roads at the facility shall be paved.
B. Traffic on the haul roads shall not exceed 10 mph. The speed limit shall be posted on all haul roads.
C. Cleaning of the haul roads shall be done at least once per calendar week. All sweeping

must be completed with, at a minimum, with an improved technology (wet) sweeper type. An improved technology sweeper type shall be at minimum an enclosed wet broom sweeper or a wet vacuum sweeper. The sweeper shall be operated according to manufacturer's specifications.

1. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35o F (1.7o C) or conditions due to weather (e.g., the facility uses an ice melting agent to remove ice from the facility's roads), could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
2. Sweeping need not occur when a paved road(s) will not be used for that calendar week.
3. There shall be a minimum of 4 calendar days between each weekly scheduled sweeping event. This permit condition shall not apply if the facility is required to conduct more frequent sweeping as per Condition D or if it chooses to sweep the haul roads more frequently than once per calendar week.
4. The owner or operator shall record the frequency of cleaning performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
5. The owner or operator shall record the type of cleaning (i.e. sweeping, washing, etc.) performed on the haul road.

D. Performance testing on the haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt load (g/m2) sampling shall be done for at a minimum of three (3) different locations. The three sampled locations shall then be averaged to determine the silt loading average results. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 (Procedures for Sampling Surface/Bulk Dust Loading) and C.2 (Procedures for Laboratory Analysis of Surface/Bulk Dust Loading Samples).

1. Performance testing (silt load sampling) shall be completed no earlier than three (3) calendar days prior to a weekly sweeping event.
2. Performance testing shall be completed prior to water flushing and/or wet sweeping.
3. During the first twelve (12) months of operation, after permit issuance, the facility shall meet the following requirements:
   a. Should the monthly silt load test (average) exceed 90% of 1.16 g/m2 (1.05 g/m2), the facility shall complete cleaning of the haul roads with a sweeper as described in Condition C. within 48 hours of the collecting the silt load test data, as weather permits.
   b. Determine the cumulative haul road emissions for each month of operation using the methodology detained in Condition F.
   c. The initial silt load testing shall be completed after the first weekly scheduled haul road sweeping event and prior to the next weekly scheduled (week 2) haul road sweeping event. The initial silt load test shall occur, at a minimum, nine (9) calendar days after the first weekly haul road sweeping event and prior to the next scheduled sweeping event for the following week (week 2).
   d. Should the monthly silt load test (average of three samples) exceed 1.16 g/m2 , the facility shall commence daily sweeping. Daily sweeping shall continue until a subsequent monthly silt load test is less than 1.16 g/m2.
4. After the first twelve (12) months of operation, the facility shall monthly:
   a. Determine the cumulative haul road emissions (in tons) for each month of operation using the methodology detained in Condition G.
   b. Calculate the 12-month rolling total haul road emissions (in tons) for each month of

operation using the methodology detained in Condition G.

c. Should the 12-month rolling total haul road emissions exceed 90% of 4.62 tons PM10 (4.16 tons), the facility shall complete cleaning of the haul roads with a sweeper as described in Condition E. on a daily basis.
d. Daily sweeping shall continue until the calculate 12-month rolling total haul road emissions are less than 4.62 tons (PM10).

5. If monthly silt load testing cannot be accomplished because conditions due to weather (i.e., the ambient air temperature (as measured at the facility during daylight operating hours) is considered extreme or precipitation events) could create hazardous conditions or affect test results, then the sampling shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sampling have abated.
6. Upon the completion of, at a minimum, eighteen (18) monthly silt load tests and associated calculations that demonstrate compliance with the 12-month rolling total limit of 4.62 tons (PM10), the owner or operator may request a permit amendment to reduce the frequency of silt load testing.

E. The owner or operator shall maintain a log of each silt load sampling event that contains, at a minimum, the following:

1. The date of silt load sampling event;
2. The location and size of the sampling area;
3. The measured silt content in grams;
4. The average silt loading results in g/m^2 for each month;
5. Sample area used for silt load sampling in meters; and,
6. The operator's initials.

F. The owner or operator shall:

1. Record the vehicle miles traveled (VMT) each day on the Haul Roads (EU F100);
2. Record the vehicle miles traveled (VMT) each month on the Haul Roads (EU F100);
3. Calculate the monthly PM_{10} emissions for the Haul Roads (EU F100) based on the monthly VMT; and,
4. Calculate the twelve (12) month rolling total amount of PM_{10} emissions for the Haul Roads (EU F100) based on the monthly VMT.

G. Best Management Practices (BMP) – Clean up spills, truck scale areas, etc. Golden Grain Energy, LLC shall implement “good housekeeping” or best management practices to minimize fugitive emissions. Such practices include but are not limited to:

1. Clean up spills of raw materials or product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing emissions.
2. Complete weekly housekeeping around truck scale areas and loading / loadout areas.
3. Maintain and post speed limit signs.
4. GGE will, to the greatest extent practicable, ensure haul trucks are enclosed or covered.

H. The facility shall maintain records of BMP activities completed under Condition G.

Authority for Requirement: DNR Construction Permit 06-A-055-P2

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

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Emission Point	Emission Unit	Emission Unit Description	Raw Material/ Fuel	Rated Capacity (gallons)	Construction Permit
EP T60a	EU T60a	Final Product Storage Tank	Ethanol	1,000,000	07-A-438-P3
EP T60b	EU T60b	Final Product Storage Tank	Ethanol	1,000,000	07-A-439-P3

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.

At this time there are no emission limits for these emission points.

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 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 record and report as specified in 40 CFR Part 60 §60.115b(a) *Reporting and recordkeeping requirements* and 40 CFR Part 60 §60.116b *Monitoring of operations*.
C. The owner or operator shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the lifetime of the source
D. These tanks shall be used to store only denatured ethanol or undenatured ethanol.
E. The owner or operator shall follow the applicable requirements of 40 CFR 63.2470.
F. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525.

Authority for Requirement: DNR Construction Permits 07-A-438-P3, 07-A-439-P3
40 CFR Part 63 Subpart FFFF
567 IAC 23.1(4)"cf"
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

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-438-P3, 07-A-439-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 any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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

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Emission Point	Emission Units	Emission Unit Description	Raw Material/ Fuel	Rated Capacity (gallons)	Construction Permit
EP T61	EU T61	Final Product Storage Tank	Ethanol	750,000	03-A-608-P5
EP T62	EU T62	Final Product Storage Tank	Ethanol	750,000	03-A-609-P5

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.

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.

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 record and report as specified in 40 CFR Part 60 §60.115b(a) *Reporting and recordkeeping requirements* and 40 CFR Part 60 §60.116b *Monitoring of operations*.
C. The owner or operator shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage vessel for the lifetime of the source
D. These tanks shall be used to store only denatured ethanol or undenatured ethanol.
E. The owner or operator shall follow the applicable requirements of 40 CFR 63.2470.
F. The owner or operator shall keep records and submit notifications and reports as required by 40 CFR 63.2515 through 63.2525.

Authority for Requirement: DNR Construction Permits 03-A-608-P5, 03-A-609-P5
40 CFR Part 63 Subpart FFFF
567 IAC 23.1(4)"cf"
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

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-608-P5, 03-A-609-P5

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

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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.

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).

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-610-P2
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NESHAP:
This tank is subject to 40 CFR 63 Subpart FFFF – Miscellaneous Organic Chemical Manufacturing.
Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

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-610-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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 T64

Associated Equipment

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

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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.

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).

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-611-P2
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NESHAP:
This tank is subject to 40 CFR 63 Subpart FFFF – Miscellaneous Organic Chemical Manufacturing.
Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

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-611-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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-611-P2

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

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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.

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)

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-612-P2
40 CRF Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

NESHAP:
This tank is subject to 40 CFR 63 Subpart FFFF – Miscellaneous Organic Chemical Manufacturing.
Authority for Requirement: 40 CFR 63 Subpart FFFF
567 IAC 23.1(4)"cf"

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-612-P2

The temperature and flowrate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within 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-612-P2

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. *567 IAC 22.108(9)"a"*
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. *567 IAC 22.105 (2)"h"(3)*
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. *567 IAC 22.108 (1)"b"*
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. *567 IAC 22.108 (14)*
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. *567 IAC 22.108 (9)"b"*
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. *567 IAC 22.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). *567 IAC 22.116(2)*
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). *567 IAC 22.105*

G3. Certification Requirement for Title V Related Documents

Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *567 IAC 22.107 (4)*

G4. Annual Compliance Certification

By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. *567 IAC 22.108 (15)"e"*

G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 22.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges

Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"*

G8. Duty to Provide Information

The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. *567 IAC 22.108 (9)"e"*

G9. General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. *567 IAC 24.2(1)*

G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
    a. The date, place and time of sampling or measurements
    b. The date the analyses were performed.
    c. The company or entity that performed the analyses.
    d. The analytical techniques or methods used.
    e. The results of such analyses; and
    f. The operating conditions as existing at the time of sampling or measurement.
    g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
    a. Comply with all terms and conditions of this permit specific to each alternative scenario.
    b. Maintain a log at the permitted facility of the scenario under which it is operating.

c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. *567 IAC 22.108(4), 567 IAC 22.108(12)*

G11. Evidence used in establishing that a violation has or is occurring.

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.

1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;

b. Compliance test methods specified in 567 Chapter 25; or

c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.

2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:

a. Any monitoring or testing methods provided in these rules; or

b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. *567 IAC 21.5(1)-567 IAC 21.5(2)*

G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Act, the permittee shall notify the department of this requirement. The plan shall be filed with all appropriate authorities by the deadline specified by EPA. A certification that this risk management plan is being properly implemented shall be included in the annual compliance certification of this permit. *567 IAC 22.108(6)*

G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). *567 IAC Chapter 131-State Only*

G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to

determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and expected duration of the excess emission.

iv. The cause of the excess emission.

v. The steps being taken to remedy the excess emission.

vi. The steps being taken to limit the excess emission in the interim period.

b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the following:

i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.

vi. The steps that were taken to limit the excess emission.

vii. If the owner claims that the excess emission was due to malfunction, documentation to support this claim. *567 IAC 24.1(1)-567 IAC 24.1(4)*

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an “emergency” means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission

limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The facility at the time was being properly operated;

c. During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements of the permit; and

d. The permittee submitted notice of the emergency to the director by certified mail within two working days of the time when the emissions limitations were exceeded due to the emergency. This notice fulfills the requirement of paragraph 22.108(5)"b." – See G15. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

G15. Permit Deviation Reporting Requirements

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

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

During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. *567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)*

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

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

a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.

b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);

c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);

d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));.

e. The changes comply with all applicable requirements.

f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,

ii. The date on which the change will occur,

iii. Any change in emission as a result of that change,

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

vii. Any permit term or condition no longer applicable as a result of the change. *567 IAC 22.110(1)*

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

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

4. The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. *567 IAC 22.110(4)*

5. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. *567 IAC 22.108(11)*

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

a. An administrative permit amendment is a permit revision that does any of the following:

i. Correct typographical errors

ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;

iii. Require more frequent monitoring or reporting by the permittee; or

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility,

coverage and liability between the current and new permittee has been submitted to the director.

b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.

c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.

a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:

i. Do not violate any applicable requirement;

ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;

iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;

iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;

v. Are not modifications under any provision of Title I of the Act; and

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B).

b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;

ii. The permittee's suggested draft permit;

iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and

iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against the facility.

3. Significant Title V Permit Modification.
Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.
The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113*

G19. Duty to Obtain Construction Permits
Unless exempted in 567 IAC 22.1(2) or to meet the parameters established in 567 IAC 22.1(1)"c", the permittee shall not construct, install, reconstruct or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, or conditional permit, or permit pursuant to rule 567 IAC 22.8, or permits required pursuant to rules 567 IAC 22.4, 567 IAC 22.5, 567 IAC 31.3, and 567 IAC 33.3 as required in 567 IAC 22.1(1). A permit shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source or anaerobic lagoon. *567 IAC 22.1(1)*

G20. Asbestos
The permittee shall comply with 567 IAC 23.1(3)"a", and 567 IAC 23.2(3)"g" when activities involve asbestos mills, surfacing of roadways, manufacturing operations, fabricating, insulating, waste disposal, spraying applications, demolition and renovation operations (*567 IAC 23.1(3)"a");* training fires and controlled burning of a demolished building *(567 IAC 23.2).*

G21. Open Burning
The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. *567 IAC 23.2 except 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only*

G22. Acid Rain (Title IV) Emissions Allowances
The permittee shall not exceed any allowances that it holds under Title IV of the Act or the regulations promulgated there under. Annual emissions of sulfur dioxide in excess of the number of allowances to emit sulfur dioxide held by the owners and operators of the unit or the designated representative of the owners and operators is prohibited. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 22.108(7)*

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.

b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.

c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.

d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.

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

5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *40 CFR part 82*

G24. Permit Reopenings

1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. *567 IAC 22.108(9)"c"*

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;

b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original

permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. *567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"*

3. A permit shall be reopened and revised under any of the following circumstances:

a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;

b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.

d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. *567 IAC 22.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. *567 IAC 22.114(2)*

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. *567 IAC 22.114(3)*

G25. Permit Shield

1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:

a. Such applicable requirements are included and are specifically identified in the permit; or

b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

3. A permit shield shall not alter or affect the following:

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;

b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;

d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. *567 IAC 22.108 (18)*

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. *567 IAC 22.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 22.108 (9)"d"*

G28. Transferability

This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). *567 IAC 22.111 (1)"d"*

G29. Disclaimer

No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. *567 IAC 22.3(3)"c"*

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification

The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department’s request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

Stack test notifications, reports and correspondence shall be sent to:

Stack Test Review Coordinator
Iowa DNR, Air Quality Bureau
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-9545

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program.

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons.

567 IAC 26.1(1)

G32. Contacts List

The current address and phone number for reports and notifications to the EPA administrator is:

Iowa Compliance Officer
Air Branch
Enforcement and Compliance Assurance Division
U.S. EPA Region 7
11201 Renner Blvd.
Lenexa, KS 66219
(913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau
Iowa Department of Natural Resources
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-8200

Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

Field Office 1
1101 Commercial Court, Suite 10
Manchester, IA 52057
(563) 927-2640

Field Office 2
2300-15th St., SW
Mason City, IA 50401
(641) 424-4073

Field Office 3
1900 N. Grand Ave.
Spencer, IA 51301
(712) 262-4177

Field Office 4
1401 Sunnyside Lane
Atlantic, IA 50022
(712) 243-1934

Field Office 5
Wallace State Office Building
502 E 9th St.
Des Moines, IA 50319-0034
(515) 725-0268

Field Office 6
1023 West Madison Street
Washington, IA 52353-1623
(319) 653-2135

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

Linn County Public Health
Air Quality Branch
1020 6th Street SE
Cedar Rapids, IA 52401
(319) 892-6000

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 I*ndustrial, 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 DD – Standards of Performance for Grain Elevators
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-DD

D. 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

E. 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

F. 40 CFR Part 60 Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VVa

G. 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

H. 40 CFR Part 63 Subpart A – *General Provisions*
http://www.ecfr.gov/cgi-bin/retrieveECFR?gp=&r=SUBPART&n=sp40.10.63.a

I. 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