Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Big River Resources West Burlington LLC
Facility Location: 15210 103rd St., West Burlington, IA 52655
Air Quality Operating Permit Number: 09-TV-005R2-M001
Expiration Date: February 14, 2027
Permit Renewal Application Deadline: August 14, 2026

EIQ Number: 92-7013
Facility File Number: 29-02-012

Responsible Official
Name: Brian Schasel
Title: Environmental/Technical Director
Mailing Address: 211 N. Gear Avenue, West Burlington, IA 52655
Phone #: 319-753-1100

Permit Contact Person for the Facility
Name: Brian Schasel
Title: Environmental/Technical Director
Mailing Address: 211 N. Gear Avenue, West Burlington, IA 52655
Phone #: 319-753-1100

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24, and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein 02/24/2025

Marnie Stein, Supervisor of Air Operating Permits Section Date

Table of Contents

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
DNR .....Iowa Department of Natural Resources
MMgal/yr……Million gallons per year
MVAC.....motor vehicle air conditioner
NAICS.....North American Industry Classification System
NSPS .....new source performance standard
NESHAP .....National Emission Standards for Hazardous Air Pollutants
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: Big River Resources West Burlington LLC
Permit Number: 09-TV-005R2-M001

Facility Description: Denatured Ethanol Plant (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
S10	DR-7103	Natural Gas Dryer A	03-A-048-S9
	DR-7203	Natural Gas Dryer B	
	B10	Heat Recovery Boiler	
	S10	Distillation	
	ET-4501	190 Condenser	
	TS-2201	Slurry Tank #1	
	TS-25001	Slurry Tank #2	
	TP-4507	Reflux Tank, Side 1	
	TP-4608	Regen Tank, Side 1	
S10B	DR-7103B	Natural Gas Dryer C	06-A-623-S3
	DR-7203B	Natural Gas Dryer D	
	B10B	Heat Recovery Boiler	
	S10B	Distillation	
	ET-5501	190 Condenser	
	TS-2201	Slurry Tank #1	
	TS-25001	Slurry Tank #2	
	TP-5507	Reflux Tank, Side 2	
	TP-5608	Regen Tank, Side 2	
S20	BF-176	Grain Unloading	03-A-049-S2
	BF-103A	Grain Bin	
	BF-103B	Grain Bin	
S25	CD-15056	South Pit Conveyor	13-A-454-S2
	CD-15057	South Pit Transfer conveyor	
	CD-15158	North Pit Conveyor	
	CD-15157	Reclaim Conveyor	
	CD-15159	Pit transfer conveyor	
	CD-15001	Middle Leg	
	CD-15002	West Leg	
	CD-15003	East Leg	
	CD-15201	Dryer reclaim conveyor	
	CD-15255	Bin 15256 fill conveyor	
	CD-15257	Reclaim conveyor	
	CD-15155	Bin 15156 fill conveyor	
	CD-15159B	Transfer belt conveyor	

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
S25	CD-15301	Transfer belt conveyor 1	13-A-454-S2
	CD-15302	Transfer belt conveyor 2	
	CD-15303	Transfer belt conveyor 3	
	CD-15304	Transfer belt conveyor 4	
	CD-15060	Outlet diverter	
	CD-15062	Outlet diverter	
	CD-15062B	Outlet diverter	
	CD-15152	Outlet diverter	
	CD-15156	Outlet diverter	
S30	S30	Hammermill	03-A-050-S2
S30B	S30B	Hammermill	05-A-816-S2
S40	TF-3101	Fermenter 1	05-A-817-S6
	TF-3102	Fermenter 2	
	TF-3201	Fermenter 3	
	TF-3202	Fermenter 4	
	TF-3203	Fermenter 5	
	TF-3204	Fermenter 6	
	TF-3103	Fermenter 7	
	TF-3301	Beer Well	
S40B	TF-3101	Fermenter 1	06-A-624-S5
	TF-3102	Fermenter 2	
	TF-3201	Fermenter 3	
	TF-3202	Fermenter 4	
	TF-3203	Fermenter 5	
	TF-3204	Fermenter 6	
	TF-3103	Fermenter 7	
	TF-3301	Beer Well	
S50	S50	Truck Product Loadout	03-A-055-S4
S50B	S50B	Rail and Truck Product Loadout	06-A-631-S1
S70	P70	DDGS Cooler Cyclone	03-A-052-S5
S70B	S70B	DDGS Cooler Cyclone	06-A-625-S2
S80	S80	Cooling Tower	05-A-368-S2
S80B	S80B	Cooling Tower	06-A-626
S90	P90	DDGS Loading	03-A-053-S3
S90B	P90B	DDGS Loading	06-A-627-S1
S101	S101	Storage Bin	06-A-111-S1
S105	S105	Storage Bin	06-A-112-S1
S201	P201	Storage Bin	13-A-455-S1
S203	P203	Wet Storage Bin	13-A-456-S1
S205	S205	Storage Bin	15-A-167-S1
T61	T61	Ethanol Storage Tank – 750,000 gallons	03-A-056-S2
T62	T62	Ethanol Storage Tank – 750,000 gallons	03-A-057-S2
T63	T63	Storage Tank – 100,000 gallons	03-A-058-S1
T64	T64	Denaturant Storage Tank – 100,000 gallons	03-A-059-S1

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
T65	T65	190 Proof Ethanol Storage Tank – 100,000 gallons	03-A-060-S1
T66	T66	Ethanol Storage Tank – 750,000 gallons	06-A-628-S1
T67	T67	Ethanol Storage Tank – 750,000 gallons	06-A-629-S1
T68	T68	Ethanol Storage Tank – 200,000 gallons	06-A-630
GRNDRY1	GRNDRY1	Grain Dryer	13-A-453
FWP	FWP	Emergency Fire Water Pump – 311 BHP	NA
F50	F50	Fugitive Emissions from Truck and Rail Product Loading (not controlled by flares)	NA
F100	F100	Fugitive Emissions w grain/DDGS handling	NA
F110	F110	Fugitive Emissions Equipment Leaks	05-A-370-S4
F120	F120	Fugitive Emissions Truck Traffic on Paved Roads	05-A-369-S2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
S51	Truck Loadout Rack - Corn Oil
T67B	Corn Oil #1 Tank (23,000 gal)
T68B	Corn Oil #2 Tank (23,000 gal)
T69	Corn Oil Tank (3,000 gal)
T70	Syrup Storage Tank Rated Capacity: 1,000 gallons
T71	Syrup Storage Tank (200 gal)
IPV	Insignificant Process Vent
CIT	Corrosion Inhibitor Tank
TS2	Corn Oil Extraction System 2

II. Plant-Wide Conditions

Facility Name: Big River Resources West Burlington LLC
Permit Number: 09-TV-005R2-M001

Permit conditions are established in accord with 567 Iowa Administrative Code rule 24.108

Permit Duration

The term of this permit is: Five years from permit issuance
Commencing on: February 15, 2022
Ending on: February 14, 2027

Amendments, modifications and reopenings of the permit shall be obtained in accordance with 567 Iowa Administrative Code rules 24.110 - 24.114. Permits may be suspended, terminated, or revoked as specified in 567 Iowa Administrative Code Rules 24.115.

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 21. 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 21.

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"

Plant-Wide Operating Limits and Requirements

Operating Limits

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

1. Plant-wide, grain usage shall not exceed 46,428,573 bushels per twelve-month rolling period.
2. Plant-wide, the total amount of denatured ethanol loaded out by truck or rail shall not exceed 130,000,000 gallons per twelve-month rolling period.
3. Plant-wide, the owner or operator is limited to blending a maximum of 6.5 million gallons of denaturant (gasoline) with ethanol per twelve-month rolling period.
4. Plant-wide, DDGS Production shall not exceed 379,590 tons per twelve-month rolling period.

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

1. Plant-wide record the amount of grain received, and update the amount received per twelve-month rolling period on a monthly basis.
2. The owner or operator shall keep records of the amount of product loaded out plant-wide, and update the twelve-month rolling total on a monthly basis.
3. The owner or operator shall keep records of the amount of denaturant used plant-wide, and update the twelve-month rolling total on a monthly basis.
4. Plant-wide, determine the cumulative amount of DDGS on a rolling-12-month basis for each month of operation.

Authority for Requirement: DNR Construction Permits 03-A-048-S9, 03-A-055-S4, 06-A-631-S1, 03-A-053-S3, 06-A-627-S1

NSPS and NESHAP Requirements

40 CFR Part 60 Subpart A
This facility is an affected source and these General Provisions apply to the facility. The affected units are B10, B10B, T61, T62, T63, T64, T65, T66, T67, T68, S25, GRNDRY1, FWP, and all units in VOC service and any applicable devices and systems in the entire facility.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 60 Subpart A
567 IAC 23.1(2)

40 CFR Part 60 Subpart Db
This facility is subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. The affected units are B10 and B10B.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 60 Subpart Db
567 IAC 23.1(2)"ccc"

40 CFR Part 60 Subpart Kb
This facility is subject to the Standards of Performance for Volatile Organic Liquid storage vessels (including petroleum liquids). This is applicable for storage tanks constructed after July 1984. The affected units are T61, T62, T63, T64, T65, T66, T67, and T68.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 60 Subpart Kb
567 IAC 23.1(2)"ddd"

40 CFR Part 60 Subpart DD
This facility is subject to the Standards of Performance for Grain Elevators. The affected units are S25 and GRNDRY1.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 60 Subpart DD
567 IAC 23.1(2)"ooo"

40 CFR Part 60 Subpart IIII
This facility is subject to the Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The affected unit is FWP.
See Appendix for a link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart IIII
567 IAC 23.1(2)"yyy"

40 CFR Part 60 Subpart VV
This 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 January 5, 1981, and 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 Part 60 Subpart VV
567 IAC 23.1(2)"nn"

40 CFR Part 63 Subpart A
This facility is an affected source and these General Provisions apply to the facility. The affected unit is FWP.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 63 Subpart A
567 IAC 23.1(4)"a"

40 CFR Part 63 Subpart ZZZZ
This facility is subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The affected unit is FWP.
See Appendix for a link to the Standard.
Authority for Requirements: 40 CFR Part 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

III. Emission Point-Specific Conditions

Facility Name: Big River Resources West Burlington
Permit Number: 09-TV-005R2-M001

Emission Point ID Number: EP-S10

Associated Equipment

Associated Emission Unit ID Numbers: DR-7103, DR-7203, B10, S10, ET-4501, TS-2201, TS-25001, TP-4507, TP-4608
Emissions Control Equipment ID Number: C10a
Emissions Control Equipment Description: Thermal Oxidizer (135 MMBtu/hr)
Continuous Emissions Monitors ID Number: CEMS1

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
S10	DR-7103	DDGS Dryer A	Natural Gas	45 MMBtu/hr
	DR-7203	DDGS Dryer B	Natural Gas	45 MMBtu/hr
	B10	Heat Recovery Boiler	Waste Heat	135 MMBtu/hr
	S10	Distillation	Ethanol	65 MMgal/yr
	ET-4501	190 Condenser	Beer	85 MMgal/yr
	TS-2201	Slurry Tank #1	Mash	16,000 gallons
	TS-25001	Slurry Tank #2	Mash	16,000 gallons
	TP-4507	Reflux Tank, Side 1	Beer	600 gallons
	TP-4608	Regen Tank, Side 1	Beer	600 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-048-S9
567 IAC 23.3(2)"d"

[(1)] An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 4.33 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 4.33 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 9.89 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 03-A-048-S9
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 15.75 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 4.33 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 20.22 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Acetaldehyde
Emission Limit(s): 0.14 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Pollutant: Total HAP
Emission Limit(s): 1.39 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-048-S9

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records 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 Db, 40 CFR 60.40b through 60.49b.

B. The dryers/thermal oxidizer shall combust only natural gas and/or process off-gases.

C. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month, as required in 40 CFR 60.49b(d). The annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit during a calendar year, and the potential heat input had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.

D. The owner or operator shall maintain records of the following information for each steam generating unit operating day, as required in 40 CFR 60.49b(g). This information shall also be submitted in a report, as required in 40 CFR 60.49b(i)

   a. Calendar date

   b. Average hourly nitrogen oxides emission (as NO_2) rates measured or predicted.

   c. 30-day average nitrogen oxides emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.

   d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the emission standard, with the reason for such excess emissions as well as a description of corrective actions taken.

   e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

   f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data. (NOTE: when the NO_x CEM is experiencing downtime, the facility is required to estimate emissions based on the 3-hour average emission rate prior to the downtime.)

   g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

   h. Identification of the times when the pollutant concentrations exceeded the full span of the continuous monitoring system.

   i. Description of any modifications to the continuous monitoring system that could affect the ability of the CMS to comply with Performance Specification 2 or 3.

j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Appendix F, Procedure 1.

E. The thermal oxidizer shall be maintained at a minimum operating temperature of 1,450 degrees F (measured as a three-hour average). The thermal oxidizer shall be operated at all times the dryers or distillation equipment is being used.

F. The owner or operator shall keep hourly records of the operating temperature of the thermal oxidizer. The owner or operator shall record all three-hour periods (during actual operations) during which the average temperature of the thermal oxidizer is not within the range of 1,450 degrees F to 1,625 degrees F.

G. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

H. The owner or operator shall keep records of control equipment inspections and repairs.

I. Plant-wide, grain usage shall not exceed 46,428,573 bushels per twelve-month rolling period.

J. Plant-wide record the amount of grain received, and update the amount received per twelve-month rolling period on a monthly basis.

Authority for Requirement: DNR Construction Permit 03-A-048-S9
40 CFR Part 60 Subpart Db
567 IAC 23.1(2) "ccc"

NSPS Applicability

This emission point is subject to NSPS Subpart A – General Provisions and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.

Authority for Requirement: DNR Construction Permit 03-A-048-S9
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart Db
567 IAC 23.1(2) "ccc"

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

Stack Height, (ft, from the ground): 125
Stack Opening (inches): 66
Exhaust Flow Rate (scfm): 76,600
Exhaust Temperature (°F): 300
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-048-S9

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

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

Continuous Emission Monitoring

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

Pollutant - NO_x
Operational Specifications – 40 CFR 60 Appendix B
Date of Initial System Calibration and Quality Assurance – 04/15/2005
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60, Appendix B
Reporting & Record keeping – 40 CFR Part 60, Appendix B
Authority for Requirement – 567 IAC 21.10 (9)

Other Parameters

Pollutant – Dilute O_2
Operational Specifications – 40 CFR Part 60, Appendix B
Date of Initial System Calibration and Quality Assurance – 04/15/2005
Ongoing System Calibration/Quality Assurance – Engineering Experience
Reporting & Record keeping – Engineering Experience
Authority for Requirement – 567 IAC 21.10 (9)

Authority for Requirement: DNR Construction Permit 03-A-048-S9

Stack Testing:

Pollutant – VOC [1]
Frequency – Once every 36 months
Test Method - 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 03-A-048-S9

Pollutant – Hazardous Air Pollutant (HAP) [1] [2]
Frequency – Once every 36 months
Test Method - 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 03-A-048-S9

[1] Most recent test conducted in June 2022.
[2] In addition, acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically.

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 21.10(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 24.108(3)

Compliance Assurance Monitoring Plan
CAM Plan for EP-S10 Thermal Oxidizer

I. Background

A. Emissions Unit:

Description: Natural Gas Fired Dryers A & B (45 MMBtu/hr each)
Heat Recovery Boiler
Distillation
190 Condenser; Slurry Tank #1; Slurry Tank #2; Reflux Tank, Side 1; Regen Tank, Side 1

Identification: EU-DR7103, EU-DR7203, EU-B10, EU-S10, EU-ET-4501, EU-TS-2201, EU-TS-25001, EU-TP-4507, EU-TP-4608

Facility: Big River Resources West Burlington LLC
15210 103rd St.,
West Burlington, IA 52655

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permit 03-A-048-S9

Limits: VOC limit – 4.33 lb/hr
HAP limit –1.39 lb/hr total HAP
HAP limit – 0.50 lb/hr Non-Acetaldehyde Single HAP
Acetaldehyde limit – 0.14 lb/hr
CO limit – 20.22 lb/hr
PM/PM limit – 4.33 lb/hr

Control: CE-C10a, Thermal Oxidizer 135 MMBtu/hr

II. Monitoring Approach

See Table I

MONITORING APPROACH JUSTIFICATION

A. Background

The dryers/thermal oxidizer system (EP-S10) at the Big River Resources West Burlington, LLC plant is subject to the Compliance Assurance Monitoring (CAM) requirements as listed in 40 CFR Part 64. Dryers A&B (EU-S10 and associated process vents) are controlled by a 135 MMBtu/hr thermal oxidizer (CE-C10a). The thermal oxidizer controls the pollutants that trigger the CAM requirements, including VOC, HAPS, CO, and PM/PM10.

B. Rationale for Selection of Performance Indicators

The rate at which VOC, HAPS, CO, PM/PM10 are controlled is greatly affected by temperature. As such, the monitoring approach relies on the fact that low temperatures indicate potential for insufficient destruction of applicable pollutants as well as the fact that higher temperatures are related to good performance. The proposed minimum outlet

combustion chamber temperature and range are based on compliance testing data and engineering knowledge of the thermal oxidizer being used. The thermal oxidizer will be maintained at a minimum temperature of 1,450°F (measured as a 3-hour average). Should the temperature fall below the minimum (3- hour average), this will be logged and reported in the semiannual report.

The outlet combustion temperature is monitored on a constant basis using the CEMS system. The temperature is monitored on a constant basis to assure the temperature does not go above or below the set range. A warning message is sent when the temperature falls out of the specified range.

Implementation of a thermal oxidizer inspection and maintenance (I/M) program provides assurance that this equipment is in good repair and is being properly operated. Once per day, a plant walk through is conducted. Any excursions or abnormalities noticed are inspected closer to determine if further maintenance or repair is needed. Proper operation of the thermal oxidizers facilitates proper pollutant reduction.

C. Rationale for Selection of Indicators

The indicator for minimum temperature was selected based on manufacturer's suggested operating temperatures, performance testing, and limits in current IDNR construction permits. Baseline combustion temperature measurements are concurrent with emissions testing. The minimum temperature is listed in the background section above. Operating according to manufacturer specifications and inspections was chosen as an indicator because this can ensure proper operations of the device, especially when combined with the temperature indicator listed above.

Table 1. Monitoring Approach

	Indicator No.1	Indicator No.2
I. Indicator	Outlet Combustion Temperature	Inspection/maintenance (I/M).
Measurement approach	Temperature of the TO is monitored on a constant basis using a CEMS in the combustion chamber outlet.	Inspection/maintenance (I/M)
II. Indicator Range	The TO will be maintained at a temperature range of 1,450°F – 1,625°F (measured as a 3-hour average). Should the temperature fall below the minimum (3-hour average), this will be logged and reported as required by the TV permit.	Detailed inspection twice a year and daily plant walk-throughs.
III. Performance Criteria		
A. Data Representativeness	Temperature is measured at the combustion chamber outlet using a thermocouple.	Maintenance as necessary, corrective action will be documented and completed per permit recommendation.
B. Verification of Operational Status	NA	Detailed inspection twice a year and daily plant walk-throughs.
C. QA/QC Practices and Criteria	CEMS and associated equipment inspected quarterly, quarterly cylinder gas audits and annual RATA.	NA
D. Monitoring Frequency	Constant via CEMS	Qualified personnel perform inspection
E. Data Collection Procedures	Records are maintained to document hourly readings and any required maintenance.	Detailed inspection twice a year and daily plant walk-throughs.
F. Averaging Period	3-hour Average (not to go below minimum temperature).	Records are maintained to Document any excursion or equipment needing maintenance.

Emission Point ID Number: EP-S10B

Associated Equipment

Associated Emission Unit ID Numbers: DR-7103B, DR-7203B, B10B, S10B, ET-5501, TS-2201, TS-25001, TP-5507, TP-5608
Emissions Control Equipment ID Number: C10B
Emissions Control Equipment Description: Thermal Oxidizer (135 MMBtu/hr)
Continuous Emissions Monitors ID Number: CEMS2

Emission Point Number	Emission Unit Numbers	Emission Unit Description	Raw Material	Rated Capacity
S10B	DR-7103B	DDGS Dryer C	Natural Gas	45 MMBtu/hr
	DR-7203B	DDGS Dryer D	Natural Gas	45 MMBtu/hr
	B10B	Heat Recovery Boiler	Waste Heat	135 MMBtu/hr
	S10B	Distillation	Ethanol	65 MMgal/yr
	ET-5501	190 Condenser	Beer	85 MMgal/yr
	TS-2201	Slurry Tank #1	Mash	16,000 gallons
	TS-25001	Slurry Tank #2	Mash	16,000 gallons
	TP-5507	Reflux Tank, Side 2	Beer	600 gallons
	TP-5608	Regen Tank, Side 2	Beer	600 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.
Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-623-S3
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 6.50 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 6.50 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 06-A-623-S3
567 IAC 23.4(7)
Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 9.89 lb/hr; 500 ppmv

Authority for Requirement: DNR Construction Permit 06-A-623-S3
567 IAC 23.3(3)

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 15.75 lb/hr; 0.1 lb/MMBtu
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 5.42 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 21.0 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Acetaldehyde
Emission Limit(s): 0.15 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Non-acetaldehyde Single HAP
Emission Limit(s): 0.61 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Pollutant: Total HAP
Emission Limit(s): 1.50 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-623-S3

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records 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 VV, 40 CFR 60.480 through 60.489.
B. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
C. The owner or operator shall follow the applicable standards of Subpart Db, 40 CFR 60.40b through 60.49b.
D. The dryers/thermal oxidizer shall combust only natural gas and/or process off-gases.
E. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day, and calculate the annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month, as required in 40 CFR 60.49b(d). The annual capacity factor is defined as the ratio between the actual heat input to a steam generating unit during a calendar year, and the potential heat input had it been operated for 8,760 hours during a calendar year at the maximum steady state design heat input capacity.

F. The owner or operator shall maintain records of the following information for each steam generating unit operating day, as required in 40 CFR 60.49b(g). This information shall also be submitted in a report, as required in 40 CFR 60.49b(i)
    a. Calendar date.
    b. Average hourly nitrogen oxides emission (as NO_2) rates measured or predicted.
    c. 30-day average nitrogen oxides emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.
    d. Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the emission standard, with the reason for such excess emissions as well as a description of corrective actions taken.
    e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
    f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data. (NOTE: when the NO_x CEM is experiencing downtime, the facility is required to estimate emissions based on the 3-hour average emission rate prior to the downtime.)
    g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
    h. Identification of the times when the pollutant concentrations exceeded the full span of the continuous monitoring system.
    i. Description of any modifications to the continuous monitoring system that could affect the ability of the CMS to comply with Performance Specification 2 or 3.
    j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Appendix F, Procedure 1.
G. The thermal oxidizer shall be maintained at a minimum operating temperature of 1,450 degrees F (measured as a three-hour average). The thermal oxidizer shall be operated at all times the dryers or distillation equipment is being used.
H. The owner or operator shall keep hourly records of the operating temperature of the thermal oxidizer. The owner or operator shall record all three-hour periods (during actual operations) during which the average temperature of the thermal oxidizer is not within the range of 1,450 degrees F to 1,625 degrees F.
I. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
J. The owner or operator shall keep records of control equipment inspections and repairs.
K. Plant-wide, grain usage shall not exceed 46,428,573 bushels per twelve-month rolling period.
L. Plant-wide record the amount of grain received, and update the amount received per twelve-month rolling period on a monthly basis.

Authority for Requirement: DNR Construction Permit 06-A-623-S3

NSPS Applicability

This emission point is subject to NSPS Subpart A – General Provisions and Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, and Subpart VV- Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

Authority for Requirement: DNR Construction Permit 06-A-623-S3
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR 60 Subpart Db
567 IAC 23.1(2) "ccc"
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 125
Stack Opening (inches): 66
Exhaust Flow Rate (scfm): 76,700
Exhaust Temperature (°F): 300
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-623-S3

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

Monitoring Requirements

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

Continuous Emission Monitoring

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

Pollutant - NO_x

Operational Specifications – 40 CFR 60 Appendix B
Date of Initial System Calibration and Quality Assurance – 04/15/2005
Ongoing System Calibration/Quality Assurance – 40 CFR Part 60, Appendix B
Reporting & Record keeping – 40 CFR Part 60, Appendix B
Authority for Requirement – 567 IAC 21.10 (9)

Other Parameters

Pollutant – Dilute O_2
Operational Specifications – 40 CFR Part 60, Appendix B
Date of Initial System Calibration and Quality Assurance – 04/15/2005
Ongoing System Calibration/Quality Assurance – Engineering Experience
Reporting & Record keeping – Engineering Experience
Authority for Requirement – 567 IAC 21.10 (9)

Authority for Requirement: DNR Construction Permit 06-A-623-S3

Stack Testing:

Pollutant – VOC [(1)]
Frequency – Once every 36 months
Test Method - 40 CFR 60, Appendix A, Method 25A
Authority for Requirement - DNR Construction Permit 06-A-623-S3

Pollutant – Hazardous Air Pollutant (HAP) [(1)] [(2)]
Frequency – Once every 36 months
Test Method - 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 06-A-623-S3

[(1)] Most recent test conducted in June 2022.
[(2)] In addition, acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically.

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 21.10(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 24.108(3)

Continuous Assurance Monitoring Plan
CAM Plan for EP-S10B Thermal Oxidizer

I. Background

A. Emissions Unit:

Description: Natural Gas Fired Dryers C & D (45 MMBtu/hr each)
Heat Recovery Boiler
Distillation
190 Condenser; Slurry Tank #1; Slurry Tank #2; Reflux Tank, Side 2; Regen Tank, Side 2

Identification: EU-DR7103B, EU-DR7203B, EU-B10. EU-S10, EU-ET-5501, EU-TS-2201, EU-TS-25001, EU-TP-5507, EU-TP-5608

Facility: Big River Resources West Burlington LLC
15210 103rd St.,
West Burlington, IA 52655

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: DNR Construction Permit 06-A-623-S3

Limits: VOC limit – 5.42 lb/hr
HAP limit – 1.50 lb/hr total HAP
HAP limit – 0.61 lb/hr; Non-Acetaldehyde Single HAP
Acetaldehyde limits – 0.15 lb/hr
CO limit – 21.00 lb/hr
PM/PM limit – 6.50 lb/hr

Control: CE-C10B, Thermal Oxidizer 135 MMBtu/hr

II. Monitoring Approach

See Table I

MONITORING APPROACH JUSTIFICATION

A. Background

The dryers/thermal oxidizer system (EP-S10B) at the Big River Resources West Burlington, LLC plant is subject to the Compliance Assurance Monitoring (CAM) requirements as listed in 40 CFR Part 64. Dryers C&D (EU-P10B and associated process vents) are controlled by a 135 MMBtu/hr thermal oxidizer (CE-C10B). The thermal oxidizer controls the pollutants that trigger the CAM requirements, including VOC, HAPS, CO, and PM/PM10.

B. Rationale for Selection of Performance Indicators

The rate at which VOC, HAPS, CO, PM/PM10 are controlled is greatly affected by temperature. As such, the monitoring approach relies on the fact that low temperatures indicate potential for insufficient destruction of applicable pollutants as well as the fact that higher temperatures are related to good performance. The proposed minimum outlet

combustion chamber temperature and range are based on compliance testing data and engineering knowledge of the thermal oxidizer being used. The thermal oxidizer will be maintained at a minimum temperature of 1,450°F (measured as a 3-hour average). Should the temperature fall below the minimum (3-hour average), this will be logged and reported in the semi-annual report.

The outlet combustion temperature is monitored on a constant basis using the CEMS system. The temperature is monitored on a constant basis to assure the temperature does not go above or below the set range. A warning message is sent when the temperature falls out of the specified range.

Implementation of a thermal oxidizer inspection and maintenance (I/M) program provides assurance that this equipment is in good repair and is being properly operated. Once per day, a plant walk through is conducted. Any excursions or abnormalities noticed are inspected closer to determine if further maintenance or repair is needed. Proper operation of the thermal oxidizers facilitates proper pollutant reduction.

C. Rationale for Selection of Indicators

The indicator for minimum temperature was selected based on manufacturer's suggested operating temperatures, performance testing, and limits in current IDNR construction permits. Baseline combustion temperature measurements are concurrent with emissions testing. The minimum temperature is listed in the background section above.
Operating according to manufacturer specifications and inspections was chosen as an indicator because this can ensure proper operations of the device, especially when combined with the temperature indicator listed above.

Table 1. Monitoring Approach

	Indicator No.1	Indicator No.2
I. Indicator	Outlet Combustion Temperature	Inspection/maintenance (I/M).
Measurement approach	Temperature of the TO is monitored on a constant basis using a CEMS in the combustion chamber outlet.	Inspection/maintenance (I/M)
II. Indicator Range	The TO will be maintained at a temperature range of 1,450°F – 1,625°F (measured as a 3-hour average). Should the temperature fall below the minimum (3-hour average), this will be logged and reported as required by the TV permit.	Detailed inspection twice a year and daily plant walk-throughs.
III. Performance Criteria		
A. Data Representativeness	Temperature is measured at the combustion chamber outlet using a thermocouple.	Maintenance as necessary, corrective action will be documented and completed per permit recommendation.
B. Verification of Operational Status	NA	Detailed inspection twice a year and daily plant walk-throughs.
C. QA/QC Practices and Criteria	Associated equipment inspected quarterly, quarterly cylinder gas audits and annual RATA.	NA
D. Monitoring Frequency	Constant via CEMS	Qualified personnel perform inspection
E. Data Collection Procedures	Records are maintained to document hourly readings and any required maintenance.	Detailed inspection twice a year and daily plant walk-throughs.
F. Averaging Period	3-hour Average (not to go below minimum temperature).	Records are maintained to Document any excursion or equipment needing maintenance.

Emission Point ID Number: EP-S20

Associated Equipment

Associated Emission Unit ID Numbers: BF176, BF103A, BF103B
Emissions Control Equipment ID Number: C20
Emissions Control Equipment Description: Baghouse

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
S20	BF-176	Grain Unloading	Shelled Corn	178.1 tons/hr
	BF-103A	Grain Bin		
	BF-103B	Grain Bin		

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-049-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.33 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-049-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 1.33 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-049-S2
567 IAC 23.4(7)

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

Operating Limits

A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
B. The grain bins shall be maintained at negative pressure at all times that the bins are in operation. The baghouse shall be operated when the grain bins are in operation and for at least 30 minutes after loading and unloading of the grain bins.

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 03-A-049-S2

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

Stack Height, (ft, from the ground): 20
Stack Opening (inches): 48
Exhaust Flow Rate (scfm): 45,850
Exhaust Temperature (°F): 84
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-049-S2

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

Monitoring Requirements

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

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

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

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

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

The data pertaining to the plan 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 24.108(3)

Emission Point ID Number: EP-S25

Associated Equipment

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

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Maximum Capacity (bushels/hr)
S25	CD-15056	South pit conveyor	Shelled Corn	15,000
	CD-15057	South pit transfer conveyor		15,000
	CD-15158	North pit conveyor		15,000
	CD-15157	Reclaim conveyor		15,000
	CD-15159	Pit transfer conveyor		15,000
	CD-15001	Middle Leg		15,000
	CD-15002	West leg		15,000
	CD-15003	East leg		15,000
	CD-15201	Dryer reclaim conveyor		15,000
	CD-15255	Bin 15256 fin conveyor		30,000
	CD-15257	Reclaim conveyor		15,000
	CD-15155	Bin 15156 fill conveyor		30,000
	CD-15159B	Transfer belt conveyor		15,000
	CD-15301	Transfer belt conveyor 1		15,000
	CD-15302	Transfer belt conveyor 2		15,000
	CD-15303	Transfer belt conveyor 3		15,000
	CD-15304	Transfer belt conveyor 4		15,000
	CD-15060	Outlet diverter		15,000
	CD-15062	Outlet diverter		15,000
	CD-15062B	Outlet diverter		15,000
	CD-15152	Outlet diverter		15,000
	CD-15156	Outlet diverter		15,000

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 13-A-454-S2
40 CFR Part 60 Subpart DD
567 IAC 23.1(2)"ooo"

[(1)]Per 40 CFR §60.302(b)(2) (NSPS Subpart DD), emissions from the baghouse exhaust shall not cause greater than 0% opacity. Any fugitive emission shall not cause greater than 5% opacity, per the requirements in 40 CFR §60.302(c)(1).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.98 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-454-S2

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.68 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-454-S2

Pollutant: Particulate Matter (PM) - Federal
Emission Limit(s): 0.01 gr/dscf
Authority for Requirement: DNR Construction Permit 13-A-454-S2
40 CFR Part 60 Subpart DD
567 IAC 23.1(2)"ooo"

Pollutant: Particulate Matter (PM) - State
Emission Limit(s): 1.68 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-454-S2

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. Maintain the control equipment according to the manufacturer's specifications.
    a. The owner or operator shall maintain records showing any maintenance performed on the control equipment.

Authority for Requirement: DNR Construction Permit 13-A-454-S2

NSPS Applicability

These Emission Units are subject to New Source Performance Standards (NSPS) Subpart DD – Standards of Performances for Grain Elevators and NSPS Subpart A – General Provisions.

Authority for Requirement: DNR Construction Permit 13-A-454-S2
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart DD
567 IAC 23.1(2)"ooo"

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

Stack Height, (ft, from the ground): 30.75
Stack Opening (inches): 50
Exhaust Flow Rate (scfm): 49,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 13-A-454-S2

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

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

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. 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 24.108(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 24.108(3)

Emission Point ID Number: EP-S30

Associated Equipment

Associated Emission Unit ID Numbers: S30
Emissions Control Equipment ID Number: C30
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: S30
Emission Unit Description: Milling/Hammermill
Raw Material/Fuel: Shelled Corn
Rated Capacity: 100 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-050-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.60 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-050-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.60 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-050-S2
567 IAC 23.4(7)

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

Operating Limits

A. The control equipment shall be inspected and maintained 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 repairs.

Authority for Requirement: DNR Construction Permit 03-A-050-S2

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

Stack Height, (ft, from the ground): 20
Stack Opening (inches): 32
Exhaust Flow Rate (scfm): 14,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-050-S2

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

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

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

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

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

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

The data pertaining to the plan 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 24.108(3)

Emission Point ID Number: EP-S30B

Associated Equipment

Associated Emission Unit ID Numbers: S30B
Emissions Control Equipment ID Number: C30B
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: S30B
Emission Unit Description: Milling/Hammermill
Raw Material/Fuel: Shelled Corn
Rated Capacity: 100 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 05-A-816-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.60 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-816-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.60 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-816-S2
567 IAC 23.4(7)

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

Operating Limits

A. The control equipment shall be inspected and maintained 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 repairs.

Authority for Requirement: DNR Construction Permit 05-A-816-S2

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

Stack Height, (ft, from the ground): 20
Stack Opening (inches): 32
Exhaust Flow Rate (scfm): 14,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-816-S2

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

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

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

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

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

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

The data pertaining to the plan 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 24.108(3)

Emission Point ID Number: EP-S40

Associated Equipment

Associated Emission Unit ID Numbers: TF-3101, TF-3102, TF-3201, TF-3202, TF-3203, TF-3204, TF-3103, TF-3301
Emissions Control Equipment ID Number: C40
Emissions Control Equipment Description: Scrubber
Continuous Emissions Monitors ID Numbers: NA

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
S40	TF-3101	Fermenter 1	Corn Slurry	730,000 gallons
	TF-3102	Fermenter 2	Corn Slurry	730,000 gallons
	TF-3201	Fermenter 3	Corn Slurry	730,000 gallons
	TF-3202	Fermenter 4	Corn Slurry	730,000 gallons
	TF-3203	Fermenter 5	Corn Slurry	730,000 gallons
	TF-3204	Fermenter 6	Corn Slurry	730,000 gallons
	TF-3103	Fermenter 7	Corn Slurry	730,000 gallons
	TF-3301	Beerwell	Beer	985,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 05-A-817-S6
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.44 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-817-S6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.44 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-817-S6
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 13.01 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-817-S6

Pollutant: Acetaldehyde (HAP)
Emission Limit(s): 0.66 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-817-S6

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-817-S6

Pollutant: Total HAP
Emission Limit(s): 0.90 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-817-S6

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, 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 Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

A. The owner/operator shall maintain an average pressure drop across the Scrubber that is greater than 1.5 inches water column based on a 24-hour averaging period.

i. The owner/operator shall record the scrubber pressure drop, in inches water column, across the scrubber on a continuous basis.

ii. The owner/operator shall calculate and record the average pressure drop, in inches water column, across the scrubber on a 24-hour averaging period.

a. If the average pressure drop deviates below the minimum required, the owner/operator shall record the time, date, and actions taken to correct the situation. The owner/operator shall also record when the pressure drop across the scrubber has returned to or above the minimum average pressure drop required.

iii. The owner/operator shall establish an alarm setting for the purpose of initiating corrective action based on the pressure drop across the scrubber of 1.5 inches water column of less.

a. On those days when there is an alarm for the pressure drop reaching 1.5 inches water column or less, the owner/operator shall calculate and record the average pressure drop, in inches water column, across the scrubber based on a 24-hour averaging period.

1. This requirement shall not apply on the days the Scrubber is not in operation or during facility startup, shutdown, or during operation at less than 50% capacity.

iv. Due to the scrubber not previously being required to monitor pressure drop, the scrubber is not equipped with this measurement device. Therefore, the owner/operator will review pressure drop data once installed and will modify the pressure drop limit within 180 days.

B. The fermentation process may operate under either the **Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**. The scrubber liquid (water) flow rate and additive rate (for both scenarios) must be set by the rates determined during the most recent stack test demonstrating compliance for each respective operating scenario.

C. The owner or operator shall record when the scrubber is operating in the Scrubber Recycle Operating Scenario or the Scrubber Non-Recycling Operating Scenario.

D. Fermentation Scrubber (C40) liquid (water) flow rate shall be maintained at or above the average rate observed during the most recent performance test for each operating scenario (**Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**) that demonstrated compliance with all applicable emission limits, based on a 3-hour averaging period.

i. The owner or operator shall record the scrubber liquid (water) flow rate on a continuous basis. Calculate and record the average liquid flow rate based on 3-hour average. If the flow rate deviates below the average liquid flow rate observed during the most recent stack test, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.

E. The additive feed rate (in milliliters per minute) shall be maintained at or above the average rate observed during the most recent performance test for each operating scenario (**Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**) that demonstrated compliance with all applicable emission limits, based on a 3-hour averaging period.

i. The owner or operator shall record the additive feed rate on a continuous basis. Calculate and record the additive feed rate based on 3-hour average. If the flow rate deviates below the average additive feed rate observed during the most recent stack test that demonstrated compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.

F. Maintain onsite a copy of the most recent performance test detailing scrubber pressure drop, scrubber liquid (water) flow rate, and additive feed rate measured during most recent performance test that demonstrated compliance with limits.

G. Maintain Fermentation Scrubber (C40) according to manufacturer specifications and maintenance schedule.

i. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Fermentation Scrubber (C40).

H. For each month of operation, the facility shall operate the scrubber according to the parameters (scrubber liquid flow rate and additive feed rate) that it established during the seasonal performance testing required to demonstrate compliance with the permitted emission limits.

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

Authority for Requirement: DNR Construction Permit 05-A-817-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 67.25
Stack Opening (inches): 20
Exhaust Flow Rate (scfm): 5,100
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-817-S6

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

Monitoring Requirements

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

Stack Testing:

Pollutant – Volatile Organic Compounds (VOC)
Frequency – Annual [2,3,4,5,6]
Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 05-A-817-S6

Pollutant – Total HAP [1]
Frequency – Annual [2,3,4,5,6]
Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 05-A-817-S6

[1] In addition, acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically.

(2) Initial performance testing shall be conducted for each seasonal scrubber operating scenario (summer and winter) the facility chooses to use to demonstrate compliance with the emissions limits.
(3) After the initial performance test establishing the summer operating parameters, the facility shall annually conduct stack testing for the qualifying seasonal period covering the months of May through September (summer), as described in the Operating Limits. Stack testing shall be conducted during the months of June, July, or August for this period. The facility shall use those tests that demonstrate compliance with the permitted emission limits to establish the scrubber liquid (water) flow rate and additive feed rate for each month of operation, as detailed in Operating Limits.
(4) After the initial performance test establishing the winter operating parameters, the facility shall conduct stack testing for the qualifying seasonal period covering the months of October through April (winter) once every 36 months, as described in Operating Limits.
(5) Testing is required to be completed on an annual basis, and shall be conducted during the months of June, July, or August for the summer operating scenario. Tests shall be performed separately for each operating scenario, **Scrubber Recycle Operating Scenario** and **Scrubber Non-Recycle Operating Scenario**.
(6) Testing is required to be completed on a once every 36 months basis, for the winter operating scenario. Tests shall be performed separately for each operating scenario, **Scrubber Recycle Operating Scenario** and **Scrubber Non-Recycle Operating Scenario**.

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 24.108(3)

Continuous Assurance Monitoring Plan
CAM Plan for EP-S40 Packed Bed Scrubber

I. Background

A. Emissions Unit:
Description: Fermentation (fermenters 1 – 7 and beer well)
Identification: EU-TF-3101, EU-TF-3102, EU-TF-3201, EU-TF-3202, EU-TF-3203, EU-TF-3204, EU-TF-3103, EU-TF-3301
Facility: Big River Resources West Burlington LLC
15210 103rd St.
West Burlington, IA 52655

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: DNR Construction Permit 05-A-817-S6
Limits: VOC limit – 13.01 lb/hr
HAP limit – 0.90 lb/hr, total HAP
HAP limit – 0.10 lb/hr, Non-Acetaldehyde Single HAP
Acetaldehyde limit – 0.66 lb/hr

Control: CE-C40, Packed Bed Scrubber

II. Monitoring Approach

See Table I

MONITORING APPROACH JUSTIFICATION

A. Background

The fermentation process (EP ID: S40) at the Big River Resources West Burlington, LLC plant is subject to the Compliance Assurance Monitoring (CAM) requirements as listed in 40 CFR Part 64. The fermentation process is controlled by a packed bed scrubber (C40). The scrubber controls the pollutants that trigger the CAM requirements, or VOC and HAP emissions.

B. Rationale for Selection of Performance Indicators

The rate at which VOC's/HAPS are controlled is greatly affected by water flow rate and the amount of chemical additive injection. As such, the monitoring approach relies on the fact that low water flow and low chemical injection may indicate potential for insufficient destruction of applicable pollutants. The proposed minimum water flow rate and chemical injection rates are based on compliance testing data and engineering knowledge of the scrubber and chemical additives. The water flow rate to the scrubber is maintained at or above the minimum flow rate from the most recent performance testing that

demonstrated compliance. Also, the chemical injection rate is maintained at or above the minion rate from the most recent performance testing that demonstrated compliance. Should the water flow rate or chemical injection rate fall below theses rates, corrective measures are taken, the incident is logged, and the incident is reported as required by the Title V Permit.

Both the water flow rate and chemical injection rate is monitored on a continual basis through the DCS. Historical and real time data can be pulled off the system to ensure average flow rates are being maintained.

An inspection and maintenance (I/M) program provides assurance that this equipment is in good repair and is being properly operated. Inspection and maintenance of the scrubber system and monitoring systems is conducted per the manufacturer's specified recommendations. Daily walkthroughs and detailed semi-annual inspections are performed. Maintenance needs and excursions are documented and performed as needed.

C. Rationale for Selection of Indicators

The indicator for minimum flow rate for both water flow rate and chemical injection rate was selected based on manufacturer's suggested parameters, performance testing, and limits in current IDNR construction permits. Baseline flow rates and measurements are concurrent with emissions testing. Operating according to manufacturer specifications and inspections was chosen as an indicator because this can ensure proper operations of the device, especially when combined with the water flow rate and chemical injection rates as mentioned above.

Table 1. Monitoring Approach

	Indicator No.1	Indicator No.2	Indicator No.3
I. Indicator	Water Flow Rate	Sodium Bisulfite Injection	Inspection/maintenance (I/M)
Measurement approach	DCS monitors constant water flow rate	DCS and Totalizer monitor chemical injection rates	Detailed inspection twice a year and daily plant walk-throughs
II. Indicator Range	Water flow rate will be maintained at an average minimum rate from the most recent performance testing that demonstrated compliance. Should indicator fall below the minimum flow rate (average) corrective measures will be made and the incident will be recorded and reported as required by the Title V Permit.	Chemical injection rate will be maintained at a minimum average injection rate from the most recent performance testing that demonstrated compliance. Should indicator fall below the minimum injection rate (average), corrective measures will be made and the incident will be recorded and reported as required by the Title V Permit.	Maintenance as necessary, corrective action will be documented and completed per permit recommendation.
III. Performance Criteria			
A. Data Representativeness	Water flow rate is measured on the DCS	Injection rate is monitored at the DCS and totalizer	Detailed inspection twice a year and daily plant walk-throughs
B. Verification of Operational Status	NA	NA	NA
C. QA/QC Practices and Criteria	Water flow rate and additive flow rate measured during annual stack testing.		Qualified personnel perform Inspection.
D. Monitoring Frequency	Constant	Constant	Detailed inspection twice a year and daily plant walk-throughs
E. Data Collection Procedures	Constant via DCS	Constant via DCS	Records are maintained to Document any excursion or equipment needing maintenance
F. Averaging Period	Daily	Daily	NA

Emission Point ID Number: EP-S40B

Associated Equipment

Associated Emission Unit ID Numbers: TF-3101, TF-3102, TF-3201, TF-3202, TF-3203, TF-3204, TF-3103, TF-3301
Emissions Control Equipment ID Number: C40B
Emissions Control Equipment Description: Scrubber

Emission Point Number	Emission Unit Number	Emission Unit Description	Raw Material	Rated Capacity
S40B	TF-3101	Fermenter 1	Corn Slurry	730,000 gallons
	TF-3102	Fermenter 2	Corn Slurry	730,000 gallons
	TF-3201	Fermenter 3	Corn Slurry	730,000 gallons
	TF-3202	Fermenter 4	Corn Slurry	730,000 gallons
	TF-3203	Fermenter 5	Corn Slurry	730,000 gallons
	TF-3204	Fermenter 6	Corn Slurry	730,000 gallons
	TF-3103	Fermenter 7	Corn Slurry	730,000 gallons
	TF-3301	Beerwell	Beer	985,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-624-S5
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.94 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-624-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.94 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 06-A-624-S5
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 15.53 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-624-S5

Pollutant: Acetaldehyde (HAP)
Emission Limit(s): 0.96 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-624-S5

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.12 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-624-S5

Pollutant: Total HAP
Emission Limit(s): 1.18 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-624-S5

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, 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 Department. Records shall be legible and maintained in an orderly manner.

The operating requirements and associated recordkeeping for this permit shall be:

A. The owner/operator shall maintain an average pressure drop across the Scrubber that is greater than 1.5 inches water column based on a 24-hour averaging period.

i. The owner/operator shall record the scrubber pressure drop, in inches water column, across the scrubber on a continuous basis.

ii. The owner/operator shall calculate and record the average pressure drop, in inches water column, across the scrubber on a 24-hour averaging period.

a. If the average pressure drop deviates below the minimum required, the owner/operator shall record the time, date, and actions taken to correct the situation. The owner/operator shall also record when the pressure drop across the scrubber has returned to or above the minimum average pressure drop required.

iii. The owner/operator shall establish an alarm setting for the purpose of initiating corrective action based on the pressure drop across the scrubber of 1.5 inches water column of less.

a. On those days when there is an alarm for the pressure drop reaching 1.5 inches water column or less, the owner/operator shall calculate and record the average pressure drop, in inches water column, across the scrubber based on a 24-hour averaging period.

1. This requirement shall not apply on the days the Scrubber is not in operation or during facility startup, shutdown, or during operation at less than 50% capacity.

iv. Due to the scrubber not previously being required to monitor pressure drop, the scrubber is not equipped with this measurement device. Therefore, the owner/operator will review pressure drop data once installed and will modify the pressure drop limit within 180 days.

B. The fermentation process may operate under either the **Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**. The scrubber liquid (water) flow rate and additive rate (for both scenarios) must be set by the rates determined during the most recent stack test

demonstrating compliance for each respective operating scenario.

C. The owner or operator shall record when the scrubber is operating in the Scrubber Recycle Operating Scenario or the Scrubber Non-Recycling Operating Scenario.

D. Fermentation Scrubber (C40B) liquid (water) flow rate shall be maintained at or above the average rate observed during the most recent performance test for each operating scenario (**Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**) that demonstrated compliance with all applicable emission limits, based on a 3-hour averaging period.

i. The owner or operator shall record the scrubber liquid (water) flow rate on a continuous basis. Calculate and record the average liquid flow rate based on 3-hour average. If the flow rate deviates below the average liquid flow rate observed during the most recent stack test, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.

E. The additive feed rate (in milliliters per minute) shall be maintained at or above the average rate observed during the most recent performance test for each operating scenario (**Scrubber Recycle Operating Scenario** or **Scrubber Non-Recycle Operating Scenario**) that demonstrated compliance with all applicable emission limits, based on a 3-hour averaging period.

i. The owner or operator shall record the additive feed rate on a continuous basis. Calculate and record the additive feed rate based on 3-hour average. If the flow rate deviates below the average additive feed rate observed during the most recent stack test that demonstrated compliance, record the time, date and actions taken to correct the situation and also when the parameter is back above the average flow rate.

F. Maintain onsite a copy of the most recent performance test detailing scrubber pressure drop, scrubber liquid (water) flow rate, and additive feed rate measured during most recent performance test that demonstrated compliance with limits.

G. Maintain Fermentation Scrubber (C40B) according to manufacturer specifications and maintenance schedule.

i. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of Fermentation Scrubber (C40B).

H. For each month of operation, the facility shall operate the scrubber according to the parameters (scrubber liquid flow rate and additive feed rate) that it established during the seasonal performance testing required to demonstrate compliance with the permitted emission limits.

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

Authority for Requirement: DNR Construction Permit 06-A-624-S5

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

Stack Height, (ft, from the ground): 75
Stack Opening (inches): 20
Exhaust Flow Rate (scfm): 7,400
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-624-S5

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

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

Stack Testing:

Pollutant – Volatile Organic Compounds (VOC)
Frequency – Annual [2,3,4,5,6]
Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 06-A-624-S5

Pollutant – Total HAP [1]
Frequency – Annual [2,3,4,5,6]
Test Method – 40 CFR 63, Appendix A, Method 320 or
40 CFR 60, Appendix A, Method 18
Authority for Requirement - DNR Construction Permit 06-A-624-S5

[1] In addition, acrolein, acetaldehyde, formaldehyde and methanol shall be tested for specifically.
[2] Initial performance testing shall be conducted for each seasonal scrubber operating scenario (summer and winter) the facility chooses to use to demonstrate compliance with the emissions limits.
[3] After the initial performance test establishing the summer operating parameters, the facility shall annually conduct stack testing for the qualifying seasonal period covering the months of May through September (summer), as described in Operating Limits. Stack testing shall be conducted during the months of June, July, or August for this period. The facility shall use those tests that demonstrate compliance with the permitted emission limits to establish the scrubber liquid (water) flow rate and additive feed rate for each month of operation, as detailed in Operating Limits.
[4] After the initial performance test establishing the winter operating parameters, the facility shall conduct stack testing for the qualifying seasonal period covering the months of October through April (winter) once every 36 months, as described in Operating Limits.
[5] Testing is required to be completed on an annual basis, and shall be conducted during the months of June, July, or August for the summer operating scenario. Tests shall be performed separately for each operating scenario, **Scrubber Recycle Operating Scenario** and **Scrubber Non-Recycle Operating Scenario**.

(6) Testing is required to be completed on a once every 36 months basis, for the winter operating scenario. Tests shall be performed separately for each operating scenario, **Scrubber Recycle Operating Scenario** and **Scrubber Non-Recycle Operating Scenario**.

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 24.108(3)

Compliance Assurance Monitoring Plan
CAM Plan for EP-S40B Packed Bed Scrubber

I. Background

A. Emissions Unit:
Description: Fermentation (process vessels and beer well)
Identification: EU-TF-3101, EU-TF-3102, EU-TF-3201, EU-TF-3202, EU-TF-3203, EU-TF-3204, EU-TF3103, EU-TF-3301
Facility: Big River Resources West Burlington LLC
15210 103rd St.
West Burlington, IA 52655

B. Applicable Regulation, Emission Limit, and Monitoring Requirements
Regulation No.: DNR Construction Permit 06-A-624-S5
Limits: VOC limit – 15.53 lb/hr
HAP limit – 1.18 lb/hr total HAP
HAP limit – 0.12 lb/hr, Non-Acetaldehyde Single
Acetaldehyde limit – 0.96 lb/hr

Control: CE-C40B, Packed Bed Scrubber

II. Monitoring Approach

See Table I

MONITORING APPROACH JUSTIFICATION

A. Background

The fermentation process (EP-S40B) at the Big River Resources West Burlington, LLC plant is subject to the Compliance Assurance Monitoring (CAM) requirements as listed in 40 CFR Part 64. The fermentation process is controlled by a packed bed scrubber (CE-C40B). The scrubber controls the pollutants that trigger the CAM requirements, or VOC and HAP emissions.

B. Rationale for Selection of Performance Indicators

The rate at which VOC's/HAPS are controlled is greatly affected by water flow rate and the amount of chemical additive injection. As such, the monitoring approach relies on the fact that low water flow and low chemical injection may indicate potential for insufficient destruction of applicable pollutants. The proposed minimum water flow rate and chemical injection rates are based on compliance testing data and engineering knowledge of the scrubber and chemical additives. The water flow rate to the scrubber is maintained at or above the minimum flow rate from the most recent performance testing that demonstrated compliance. Also, the chemical injection rate is maintained at or above the minimum injection rate from the most recent

performance testing that demonstrated compliance. Should the water flow rate or chemical injection rate fall below theses rates, corrective measures are taken, the incident is logged, and the incident is reported as required by the Title V Permit.

Both the water flow rate and chemical injection rate is monitored on a continual basis through the DCS. Historical and real time data can be pulled off the system to ensure average flow rates are being maintained.

An inspection and maintenance (I/M) program provides assurance that this equipment is in good repair and is being properly operated. Inspection and maintenance of the scrubber system and monitoring systems is conducted per the manufacturer's specified recommendations. Daily walkthroughs and detailed semi-annual inspections are performed. Maintenance needs and excursions are documented and performed as needed.

C. Rationale for Selection of Indicators

The indicator for minimum flow rate for both water flow rate and chemical injection rate was selected based on manufacturer's suggested parameters, performance testing, and limits in current IDNR construction permits. Baseline flow rates and measurements are concurrent with emissions testing.

Operating according to manufacturer specifications and inspections was chosen as an indicator because this can ensure proper operations of the device, especially when combined with the water flow rate and chemical injection rates as mentioned above.

Table 1. Monitoring Approach

	Indicator No.1	Indicator No.2	Indicator No.3
I. Indicator	Water Flow Rate	Sodium Bisulfite Injection	Inspection/maintenance (I/M)
Measurement approach	DCS monitors constant water flow rate	DCS and Totalizer monitor chemical injection rates	Detailed inspection twice a year and daily plant walk-throughs
II. Indicator Range	Water flow rate will be maintained at an average minimum rate from the most recent performance testing that demonstrated compliance. Should indicator fall below the minimum flow rate (average), corrective measures will be made and the incident will be recorded and reported as required by the Title V Permit.	Chemical injection rate will be maintained at a minimum average rate from the most recent performance testing that demonstrated compliance. Should indicator fall below the minimum injection rate (average) corrective measures will be made and the incident will be recorded and reported as required by the Title V Permit.	Maintenance as necessary, corrective action will be documented and completed per permit recommendation.
III. Performance Criteria			
A. Data Representativeness	Water flow rate is measured on the DCS	Injection rate is monitored at the DCS and totalizer	Detailed inspection twice a year and daily plant walk-throughs
B. Verification of Operational Status	NA	NA	NA
C. QA/QC Practices and Criteria	Water flow rate and additive flow rate measured during annual stack testing.		Qualified personnel perform Inspection.
D. Monitoring Frequency	Constant	Constant	Detailed inspection twice a year and daily plant walk-throughs
E. Data Collection Procedures	Constant via DCS	Constant via DCS	Records are maintained to Document any excursion or equipment needing maintenance
F. Averaging Period	Daily	Daily	NA

Emission Point ID Number: EP-S50

Associated Equipment

Associated Emission Unit ID Numbers: S50
Emissions Control Equipment ID Number: C50
Emissions Control Equipment Description: Flare with Vapor Recovery System (6.4 MMBtu/hr)

Emission Unit vented through this Emission Point: S50
Emission Unit Description: Truck Product Loadout
Raw Material/Fuel: Ethanol
Rated Capacity: 600 gal/min

Applicable Requirements

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

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxides (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.13 ton/yr
Authority for Requirement: DNR Construction Permit 03-A-055-S4

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.83 ton/yr
Authority for Requirement: DNR Construction Permit 03-A-055-S4

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 5.96 ton/yr
Authority for Requirement: DNR Construction Permit 03-A-055-S4

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records 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 VV, 40 CFR 60.480 through 60.489.
B. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
C. The control equipment shall be used whenever product is loaded through the truck loadout.
D. The flare shall be limited to operating 5000 hours per twelve-month rolling period. (Note: the pilot light may operate 8760 hours per year).
E. The owner or operator shall keep records of the number of hours the flare is operated, and update the twelve-month rolling total on a monthly basis.
F. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
G. The owner or operator shall keep records of control equipment inspections and repairs.
H. Plant-wide the total amount of denatured ethanol loaded out by truck or rail shall not exceed 130,000,000 gallons per twelve-month rolling period.
I. The owner or operator shall keep records of the amount of product loaded out plant-wide, and update the twelve-month rolling total on a monthly basis.
J. Plant-wide, the owner or operator is limited to blending a maximum of 6.5 million gallons of denaturant (gasoline) with ethanol per twelve-month rolling period.
K. The owner or operator shall keep 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-055-S4
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

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

Stack Height, (ft, from the ground): 20
Stack Opening (inches): 30
Exhaust Flow Rate (scfm): 6,400
Exhaust Temperature (°F): 1800
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-055-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 thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S50B

Associated Equipment

Associated Emission Unit ID Numbers: S50B
Emissions Control Equipment ID Number: C50B
Emissions Control Equipment Description: Flare with Vapor Recovery System (13.0 MMBtu/hr)

Emission Unit vented through this Emission Point: S50B
Emission Unit Description: Rail and Truck Product Loadout
Raw Material/Fuel: Ethanol
Rated Capacity: 2,600 gal/min

Applicable Requirements

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

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxides (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 2.25 ton/yr
Authority for Requirement: DNR Construction Permit 06-A-631-S1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.69 ton/yr
Authority for Requirement: DNR Construction Permit 06-A-631-S1

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 12.06 ton/yr
Authority for Requirement: DNR Construction Permit 06-A-631-S1

Operating Requirements with Associated Monitoring and Recordkeeping

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. All records 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 VV, 40 CFR 60.480 through 60.489.
B. The owner or operator shall keep records as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
C. The control equipment shall be used whenever product is loaded through the rail or truck loadout.
D. The flare shall be limited to operating 5000 hours per twelve-month rolling period. (Note: the pilot light may operate 8760 hours per year).
E. The owner or operator shall keep records of the number of hours the flare is operated, and update the twelve-month rolling total on a monthly basis.
F. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
G. The owner or operator shall keep records of control equipment inspections and repairs.
H. Plant-wide the total amount of denatured ethanol loaded out by truck or rail shall not exceed 130,000,000 gallons per twelve-month rolling period.
I. The owner or operator shall keep records of the amount of product loaded out plant-wide, and update the twelve-month rolling total on a monthly basis.
J. Plant-wide, the owner or operator is limited to blending a maximum of 6.5 million gallons of denaturant (gasoline) with ethanol per twelve-month rolling period.
K. The owner or operator shall keep 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 06-A-631-S1
40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

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

Stack Height, (ft, from the ground): 30
Stack Opening (inches): 72
Exhaust Flow Rate (scfm): 8,170
Exhaust Temperature (°F): 1,800
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-631-S1

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

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

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

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

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

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 24.108(3)

Emission Point ID Number: EP-S70

Associated Equipment

Associated Emission Unit ID Numbers: P70
Emissions Control Equipment ID Number: C70
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: P70
Emission Unit Description: DDGS Cooler Cyclone
Raw Material/Fuel: DDGS
Rated Capacity: 20 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-052-S5
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.71 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 1.71 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.00 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5

Pollutant: Acetaldehyde (HAP)
Emission Limit(s): 0.07 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5

Pollutant: Total HAP
Emission Limit(s): 0.14 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-052-S5

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.

    a. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 03-A-052-S5

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 135.7
Stack Opening (inches): 36
Exhaust Flow Rate (scfm): 35,000
Exhaust Temperature (°F): 85
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-052-S5

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

Monitoring Requirements

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

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 24.108(3)

Emission Point ID Number: EP-S70B

Associated Equipment

Associated Emission Unit ID Numbers: S70B
Emissions Control Equipment ID Number: C70B
Emissions Control Equipment Description: Baghouse
Continuous Emissions Monitors ID Numbers: NA

Emission Unit vented through this Emission Point: S70B
Emission Unit Description: DDGS Cooler
Raw Material/Fuel: DDGS
Rated Capacity: 19 tons/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-625-S2
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.24 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 1.24 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 3.25 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2

Pollutant: Acetaldehyde (HAP)
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2

Pollutant: Total HAP
Emission Limit(s): 0.15 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-625-S2

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

Operating Limits

A. The baghouse shall be operated and maintained per the manufacturer's instructions and 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 keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 06-A-625-S2

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

Stack Height, (ft, from the ground): 40
Stack Opening (inches): 38
Exhaust Flow Rate (scfm): 29,000
Exhaust Temperature (°F): 85
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-625-S2

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

Monitoring Requirements

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

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

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

The data pertaining to the plan 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 24.108(3)

Emission Point ID Number: Cooling Towers (EP-S80, EP-S80B)

Associated Equipment

Emission Point Number	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (gal/hr)	Construction Permit
S80	S80	Cooling Tower	NA	1,200,000	05-A-368-S2
S80B	S80B			1,200,000	06-A-626

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permits 05-A-368-S2, 06-A-626
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.50 lb/hr
Authority for Requirement: DNR Construction Permits 05-A-368-S2, 06-A-626

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 1.50 lb/hr
Authority for Requirement: DNR Construction Permits 05-A-368-S2, 06-A-626
567 IAC 23.3(2)"a"

Operational Limits & Requirements

The owner/operator of each equipment listed in the table above shall comply with the operational limits and requirements listed below.

Operating Limits

A. The circulating water in the cooling tower shall not exceed 3,000 parts per million (ppm) total dissolved solids (TDS). Monitoring of the TDS shall be conducted on a monthly schedule.
B. The cooling tower shall be operated and maintained per the manufacturer's specifications and instructions.

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. 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. Maintain records of all maintenance and repair to the cooling tower.

Authority for Requirement: DNR Construction Permits 05-A-368-S2, 06-A-626

Emission Point Characteristics

Each emission point listed in the table above shall conform to the specifications listed below.

Stack Height, (ft, from the ground): NA
Stack Opening (inches): 216
Exhaust Flow Rate (scfm): 1,560,000
Exhaust Temperature (°F): 85
Discharge Style: Vertical
Authority for Requirement: DNR Construction Permits 05-A-368-S2, 06-A-626

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S90

Associated Equipment

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

Emission Unit vented through this Emission Point: P90
Emission Unit Description: DDGS Loadout
Raw Material/Fuel: DDGS
Rated Capacity: 225 ton/hr

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 03-A-053-S3
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-053-S3

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.21 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-053-S3
567 IAC 23.4(7)

Pollutant: Acetaldehyde
Emission Limit(s): 0.02 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-053-S3

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.03 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-053-S3

Pollutant: Total HAP
Emission Limit(s): 0.06 lb/hr
Authority for Requirement: DNR Construction Permit 03-A-053-S3

Operational Limits & Requirements

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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.

B. The owner or operator shall keep records of control equipment inspections and repairs.

C. Plant-wide, DDGS Production shall not exceed 379,590 tons per rolling twelve (12)- month rolling period.

D. The owner or operator shall keep records of DDGS production on a monthly basis. Record and calculate the rolling 12-month totals.

Authority for Requirement: DNR Construction Permit 03-A-053-S3

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening (inches): 22
Exhaust Flow Rate (scfm): 2,800
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 03-A-053-S3

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

Monitoring Requirements

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

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

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

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

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

The data pertaining to the plan 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 24.108(3)

Emission Point ID Number: EP-S90B

Associated Equipment

Associated Emission Unit ID Numbers: P90B
Emissions Control Equipment ID Number: C90B
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: P90B
Emission Unit Description: DDGS Loading Baghouse
Raw Material/Fuel: DDGS
Rated Capacity: 350 ton/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-627-S1
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-627-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.17 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-627-S1
567 IAC 23.4(7)

Pollutant: Acetaldehyde
Emission Limit(s): 0.02 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-627-S1

Pollutant: Non-Acetaldehyde Single HAP
Emission Limit(s): 0.03 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-627-S1

Pollutant: Total HAP
Emission Limit(s): 0.06 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-627-S1

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.
    a. The owner or operator shall keep records of control equipment inspections and repairs.

B. Plant-wide, DDGS Production shall not exceed 379,590 tons per twelve (12) month rolling period.
    a. The owner or operator shall keep records of DDGS production on a monthly basis. Record and calculate the rolling 12-month totals.

Authority for Requirement: DNR Construction Permit 06-A-627-S1

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

Stack Height, (ft, from the ground): 30.75
Stack Opening (inches): 16
Exhaust Flow Rate (scfm): 5,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-627-S1

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

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

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

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

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

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 24.108(3)

Emission Point ID Number: EP-S101

Associated Equipment

Associated Emission Unit ID Numbers: S101
Emissions Control Equipment ID Number: C101
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: S101
Emission Unit Description: Storage Bin
Raw Material/Fuel: Corn
Rated Capacity: 425,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-111-S1
567 IAC 23.3(2) "d"

[(1)]An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-111-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-111-S1
567 IAC 23.4(7)

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

Operating Limits

A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.

B. The grain bin shall be maintained at negative pressure at all times that the bins are in operation. The baghouse shall be operated when the grain bins are in operation and for at least 30 minutes after loading and unloading of the grain bin.

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 06-A-111-S1

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

Stack Height, (ft, from the ground): 120
Stack Opening (inches): 12×12
Exhaust Flow Rate (scfm): 2,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-111-S1

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

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

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

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

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

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 24.108(3)

Emission Point ID Number: EP-S105

Associated Equipment

Associated Emission Unit ID Numbers: S105
Emissions Control Equipment ID Number: C105
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: S105
Emission Unit Description: Storage Bin
Raw Material/Fuel: Corn
Rated Capacity: 425,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 06-A-112-S1
567 IAC 23.3(2) "d"

[(1)]An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-112-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.34 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-112-S1
567 IAC 23.4(7)

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

Operating Limits

A. The control equipment shall be inspected and maintained according to manufacturer's recommendations.
B. The grain bin shall be maintained at negative pressure at all times that the bins are in operation. The baghouse shall be operated when the grain bins are in operation and for at least 30 minutes after loading and unloading of the grain bin.

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 06-A-112-S1

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

Stack Height, (ft, from the ground): 120
Stack Opening (inches): 12×12
Exhaust Flow Rate (scfm): 2,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 06-A-112-S1

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

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 24.108(3)

Emission Point ID Number: EP-S201

Associated Equipment

Associated Emission Unit ID Numbers: P201
Emissions Control Equipment ID Number: C201
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: P201
Emission Unit Description: Storage Bin
Raw Material/Fuel: Corn
Rated Capacity: 1,340,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 13-A-455-S1
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.033 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-455-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-455-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 13-A-455-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.

    a. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 13-A-455-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 119.2
Stack Opening (inches): 30
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): 68
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 13-A-455-S1

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

Monitoring Requirements

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

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

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

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

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 24.108(3)

Emission Point ID Number: EP-S203

Associated Equipment

Associated Emission Unit ID Numbers: P203
Emissions Control Equipment ID Number: C203
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: P203
Emission Unit Description: Storage Bin
Raw Material/Fuel: Corn
Rated Capacity: 185,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 13-A-456-S1
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.033 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-456-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-456-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 13-A-456-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.

    a. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 13-A-456-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 96.2
Stack Opening (inches): 30
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): 68
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 13-A-456-S1

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

Monitoring Requirements

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

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

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

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

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 24.108(3)

Emission Point ID Number: EP-S205

Associated Equipment

Associated Emission Unit ID Numbers: S205
Emissions Control Equipment ID Number: C205
Emissions Control Equipment Description: Baghouse

Emission Unit vented through this Emission Point: S205
Emission Unit Description: Storage Bin
Raw Material/Fuel: Corn
Rated Capacity: 1,400,000 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.

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 15-A-167-S1
567 IAC 23.3(2) "d"

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

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 0.033 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-167-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.10 lb/hr
Authority for Requirement: DNR Construction Permit 15-A-167-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 15-A-167-S1
567 IAC 23.4(7)

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The baghouse shall be operated and maintained per the manufacturer's instructions and specifications.

    i. The owner or operator shall keep records of control equipment inspections and repairs.

Authority for Requirement: DNR Construction Permit 15-A-167-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 119.2
Stack Opening (inches): 30
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): 68
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 15-A-167-S1

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

Monitoring Requirements

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

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

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

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

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

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

for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.
Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point.

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: Storage Tanks (EP-T61, EP-T62)

Associated Equipment

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

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Emission Point Number	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (gallons)	Construction Permit Number
T61	T61	Storage Tank	Denatured and/or Un-Denatured Ethanol	750,000	03-A-056-S2
T62	T62	Storage Tank	Denatured and/or Un-Denatured Ethanol	750,000	03-A-057-S2

Applicable Requirements

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

No emission limits required at this time.

Operational Limits & Requirements
The owner/operator of each equipment listed in the table above shall comply with the operational limits and requirements listed below.

Operating Limits

A. The tank shall only store denatured or undenatured ethanol.
B. 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).

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

Authority for Requirement: DNR Construction Permits 03-A-056-S2, 03-A-057-S2
40 CRF 60 Subpart Kb
567 IAC 23.1(2) "ddd"

NSPS Applicability
These emission points are subject to NSPS Subpart A – General Provisions and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Authority for Requirement: DNR Construction Permits 03-A-056-S2, 03-A-057-S2
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CRF 60 Subpart Kb
567 IAC 23.1(2) "ddd"

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

Stack Height, (ft, from the ground): 51
Stack Opening (inches): 4 total for each tank, 4×5 each
Exhaust Flow Rate (scfm): Standing and Breathing Losses
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 03-A-056-S2, 03-A-057-S2

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: Storage Tanks (EP-T63, EP-T64, EP-T65)

Associated Equipment

Associated Emission Unit ID Numbers: T63, T64, T65
Emissions Control Equipment ID Number: C63, C64, C65
Emissions Control Equipment Description: Internal Floating Roof

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Emission Point Number	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (gallons)	Construction Permit Number
T63	T63	Storage Tank	E85, Denaturant, 200 Proof Ethanol, or 190 Ethanol	100,000	03-A-058-S1
T64	T64	Storage Tank	Denaturant	100,000	03-A-059-S1
T65	T65	Storage Tank	190 Proof Ethanol	100,000	03-A-060-S1

Applicable Requirements

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

No emission limits required at this time.

Operational Limits & Requirements
The owner/operator of each equipment listed in the table above shall comply with the operational limits and requirements listed below.

Operating Limits

A. EP-T63 shall only store E85, denaturant, 200 Proof Ethanol or 190 Proof Ethanol.
B. EP-T64 shall only store denaturant.
C. EP-T65 shall only store 190 Proof ethanol.
D. 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).

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

Authority for Requirement: DNR Construction Permits 03-A-058-S1, 03-A-059-S1, 03-A-060-S1
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

NSPS Applicability
These emission points are subject to NSPS Subpart A – General Provisions and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Authority for Requirement: DNR Construction Permits 03-A-058-S1, 03-A-059-S1, 03-A-060-S1
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

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

Stack Height, (ft, from the ground): 29
Stack Opening (inches): 4 total for each tank, 4×5 each
Exhaust Flow Rate (scfm): NA-Vent
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permits 03-A-058-S1, 03-A-059-S1, 03-A-060-S1

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: Storage Tanks (EP-T66, EP-T67)

Associated Equipment

Associated Emission Unit ID Numbers: T66, T67
Emissions Control Equipment ID Number: C66, C67
Emissions Control Equipment Description: Internal Floating Roof

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Emission Point Number	Emission Unit	Emission Unit Description	Raw Material	Rated Capacity (gallons)	Construction Permit Number
T66	T66	Storage Tank	Denatured and/or Un-Denatured Ethanol	750,000	06-A-628-S1
T67	T67	Storage Tank	Denatured and/or Un-Denatured Ethanol	750,000	06-A-629-S1

Applicable Requirements

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

No emission limits required at this time.

Operational Limits & Requirements
The owner/operator of each equipment listed in the table above shall comply with the operational limits and requirements listed below.

Operating Limits

A. These tanks shall only store denatured or un-denatured ethanol.
B. 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).

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

Authority for Requirement: DNR Construction Permit 06-A-628-S1, 06-A-629-S1
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

NSPS Applicability
These emission points are subject to NSPS Subpart A – General Provisions and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Authority for Requirement: DNR Construction Permits 06-A-628-S1, 06-A-629-S1
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

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

Stack Height, (ft, from the ground): 51
Stack Opening (inches): 4 total for each tank, 4×5 each
Exhaust Flow Rate (scfm): Standing and Breathing Losses
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 06-A-628-S1, 06-A-629-S1

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-T68

Associated Equipment

Associated Emission Unit ID Numbers: T68
Emissions Control Equipment ID Number: C68
Emissions Control Equipment Description: Internal Floating Roof

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Emission Unit vented through this Emission Point: T68
Emission Unit Description: Ethanol Storage Tank
Raw Material/Fuel: 200 Proof Ethanol
Rated Capacity: 200,000 gallons

Applicable Requirements

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

No emission limits required 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. The tank shall only store 200 Proof ethanol.
B. 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).

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

Authority for Requirement: DNR Construction Permit 06-A-630
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

NSPS Applicability
This emission point is subject to NSPS Subpart A – General Provisions and Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Authority for Requirement: DNR Construction Permit 06-A-630
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart Kb
567 IAC 23.1(2) "ddd"

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

Stack Height, (ft, from the ground): 29
Stack Opening (inches): 4 total, 4×5 each
Exhaust Flow Rate (scfm): NA-Vent
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 06-A-630

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

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-GRNDRY1

Associated Equipment

Associated Emission Unit ID Number: GRNDRY1

Emission Unit vented through this Emission Point: GRNDRY1
Emission Unit Description: Grain Dryer
Raw Material/Fuel: Corn, Natural Gas
Rated Capacity: 186.67 tons/hr, 62.1 MMBtu/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% [(1)]
Authority for Requirement: DNR Construction Permit 13-A-453
567 IAC 23.3(2) "d"

[(1)]An exceedance of the indicator opacity of "10%" will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter ($PM_{2.5}$)
Emission Limit(s): 2.76 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-453

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 14.47 lb/hr
Authority for Requirement: DNR Construction Permit 13-A-453

Pollutant: Particulate Matter (PM)
Emission Limit(s): 56 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 13-A-453
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. This unit shall combust natural gas only.
B. This unit shall operate at a maximum of 1,500 hours per 12-month rolling period.

C. The amount of grain this unit processes shall not exceed 10,000,000 bushels per 12-month rolling period.
D. The column plate perforations on this unit shall not exceed 0.094 inch.

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. Maintain records showing the type of fuel used in this unit.
B. Record the number of hours this unit is operated. Calculate and record the monthly and 12-month rolling totals.
C. Record the amount of grain this unit processes, in tons. Calculate and record the monthly and 12-month rolling totals.
D. Maintain a record showing the screen perforations

Authority for Requirement: DNR Construction Permit 13-A-453

NSPS Applicability
This emission point is subject to NSPS Subpart A – General Provisions and Subpart DD, Standards of Performance for Grain Elevators.

Authority for Requirement: DNR Construction Permit 13-A-453
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart DD
567 IAC 23.1(2) "ccc"

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

Stack Height, (ft, from the ground): NA
Stack Opening (inches): NA
Exhaust Flow Rate (scfm): 500,000
Exhaust Temperature (°F): 68
Discharge Style: NA
Authority for Requirement: DNR Construction Permit 13-A-453

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

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-FWP

Associated Equipment

Associated Emission Unit ID Numbers: FWP

Emission Unit vented through this Emission Point: FWP
Emission Unit Description: Emergency Fire Water Pump
Raw Material/Fuel: Diesel
Rated Capacity: 311 BHP

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"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 2.5 lbs/MMBtu
Authority for Requirement: 567 IAC 23.3(3)

Pollutant: Non-Methane Hydrocarbons and Nitrogen Oxides (NMHC + NO_x)
Emission Limit(s): 3.0 grams/kW-hr (grams/HP-hr)
Authority for Requirement: 40 CFR 60.4205

Operating Requirements with Associated Monitoring 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

A. The fuel shall be limited to #1 or #2 diesel only with a sulfur content not to exceed 0.0015% by weight.

   i. The owner or operator shall maintain records as to the type of fuel oil used.

B. The fire water pump shall not operate more than 100 hours per twelve-month rolling period.

   i. The owner or operator shall record the number of hours the fire pump operated per month. Record and calculate the rolling 12-month totals.

Authority for Requirement:

NESHAP Applicability

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

According to 40 CFR 63.6590(c)(6), this emergency engine must meet the requirements of subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart IIII for compression ignition engines. No further requirements apply for this emergency engine under subpart ZZZZ.

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

NSPS Applicability

The emergency engine is subject to 40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. According to 40 CFR 60.4205(c) and Table 4 to Subpart IIII, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NOx	CO	PM
130 ≤ kW ≤ 560 **(175 ≤ HP ≤ 750)**	**2009+**	**4.0 (3.0)**	**3.5 (2.6)**	**0.20 (0.15)**

Fuel Requirements:

You must use diesel fuel that has a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR 60.4207 and 40 CFR 1090.305.

Compliance Requirements:

1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
    a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
    b) Changing only those emission-related settings that are permitted by the manufacturer; and
    c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.

2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).

3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
HP < 100	Within 1 year of non-permitted action [(1)]	Not required
100 ≤ HP ≤ 500	Within 1 year of engine startup, or non-permitted action [(1)]	Not required
500 < HP	Within 1 year of engine startup, or non-permitted action [(1)]	Every 8,760 hours or 3 years, whichever comes first

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

Operating and Recordkeeping Requirements

1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 60.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 60.4214(b).

Engine power	Starting model year
19 ≤ KW < 56 (25 ≤ HP < 75)	2013

56 ≤ KW < 130 (75 ≤ HP < 175)	2012
130 ≤ KW (175 ≤ HP)	2011

2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

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

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 24.108(3)

Emission Point ID Number: EP-F50

Associated Equipment

Associated Emission Unit ID Numbers: F50
Emissions Control Equipment ID Number: C50 and/or C50B
Emissions Control Equipment Description: Flare(s)

Emission Unit vented through this Emission Point: F50
Emission Unit Description: Fugitive Emissions from Truck and Rail Product Loading (not captured by flare(s))
Raw Material/Fuel: Denatured Ethanol Loading
Rated Capacity: NA

Applicable Requirements

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

No emission limits required at this time.

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

Operating Limits

No operating limits required at this time

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-F100

Associated Equipment

Associated Emission Unit ID Numbers: F100

Emission Unit vented through this Emission Point: F100
Emission Unit Description: Fugitive Emissions Associated with Grain and DDGS Handling
Raw Material/Fuel: Grain/DDGS

Applicable Requirements

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

Pollutant: Fugitive Dust
Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.
Authority for Requirement: 567 IAC 23.3(2)"c"

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

Operating Limits

No operating limits required at this time

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-F110

Associated Equipment

Associated Emission Unit ID Numbers: F110

Emission Unit vented through this Emission Point: F110
Emission Unit Description: VOC Emissions from Equipment Leaks

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): 16.95 ton/year
Authority for Requirement: DNR Construction Permit 05-A-370-S4

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

Operating Limits

A. The Component Count shall be documented as to the number and types of components used. Components include but are not limited to valves, pumps, compressor seals, flanges, etc.

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

A. Calculate and record the VOC emissions based on the documented component count. Update the VOC emission calculations as the component count varies. Emission factors shall be based on EPA document 453/R-95-017 titled Protocol for Equipment Leak Emission Estimates.

Authority for Requirement: DNR Construction Permit 05-A-370-S4

NSPS Applicability
This emission point is subject to NSPS Subpart A - General Provisions and Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

Authority for Requirement: DNR Construction Permit 05-A-370-S4
40 CFR Part 60 Subpart A
567 IAC 23.1(2)
40 CFR Part 60 Subpart VV
567 IAC 23.1(2) "nn"

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 24.108(3)

Emission Point ID Number: EP-F120

Associated Equipment

Associated Emission Unit ID Numbers: F120

Emission Unit vented through this Emission Point: F120
Emission Unit Description: Truck Traffic on Paved Roads

Applicable Requirements

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 5.83 ton/yr
Authority for Requirement: DNR Construction Permit 05-A-369-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 29.90 ton/yr
Authority for Requirement: DNR Construction Permit 05-A-369-S2

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

Operating Limits

A. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road.
B. Any spills on the road shall be cleaned up immediately.
C. Truck traffic emissions on the paved road shall be controlled by water flushing (except as noted in Item C4 in this section) and sweeping (Item C in Reporting and Recordkeeping section) once per day. The water spray rate shall be a minimum of 0.23 gallons per square yard.
    1. If water flushing followed by 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) only sweeping is required. Water flushing and/or sweeping is not required for days of inclement weather.
    2. Water flushing and sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period or the paved road(s) will not be used on a given day.
    3. Water flushing and sweeping need not occur if the plant does not receive any truck traffic that day (i.e. on a weekend).

4. Daily water flushing & daily sweeping need not occur provided that the haul road emissions do not exceed 20.93 tons PM (70% of PM PTE based on 3.0 g/m^2) for the last twelve months. This shall be calculated using the formula in Item D in "Reporting and Recordkeeping" section. Provided emissions as calculated in Item D in "Reporting and Recordkeeping" section remain below 20.93 tons for the last twelve months only weekly sweeping is required. In the event that emissions exceed 20.93 tons for the last twelve months the plant shall be required to commence daily water flushing with daily sweeping until PM emissions fall below 20.93 tons for the last twelve months.

D. Silt load performance testing shall be completed monthly with the initial testing being performed within 60 days of the permit issuance date. Testing shall be completed prior to water flushing and/or sweeping for that day. Provided the results demonstrate compliance with the PM & PM_{10} ton per year emission limits in "Emission Limits" section, reduced frequency of testing may be requested after 12 performance tests have been completed (see Item D in "Reporting and Recordkeeping" section).

E. The owner/operator shall record the number of trucks that load/unload material on a monthly basis. Based on the number of trucks the total Vehicle Miles Traveled (VMT) shall be calculated for that month.

Reporting and Recordkeeping

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

A. Record the frequency of sweeping performed on the haul roads. If the roads are not swept due to weather, a written record must be kept on site outlining the conditions.

B. Performance testing on the haul road surface silt loading shall be completed on a monthly basis. For each performance test, silt loading sampling shall be done for at least 3 different locations. Performance testing shall be completed prior to water flushing and/or sweeping.

C. The plant shall maintain a log for the haul roads that show the following:
   1. The silt content of the road for that month based on testing;
   2. The date of performance testing;
   3. The vehicle miles traveled (VMT) for that month;
   4. Each day record whether or not water flushing and sweeping was accomplished. For days w/o water flushing and/or sweeping record the circumstances (i.e. weather condition, equipment malfunction);
   5. The amount of water applied and the areas treated;
   6. The operator's initials.

D. The owner or operator shall calculate and record the monthly haul road emissions according to the following formulas, which uses the equations from AP-42 Section 13.2.1, the empirical constants, and assumes a mean vehicle weight of 28.61 tons.

   1. $$E_{PM} = \frac{[(2.049 \times (sL/2)^{0.65}) - 0.00044] \times VMT}{2000}$$

Where E = tons PM per month
sL = road surface silt loading (g/m^2) for each performance test
VMT = Vehicle miles traveled

2. $E_{PM10} = \frac{[(0.40 * (sL/2)^{0.65}) - 0.00044] * VMT}{2000}$

Where E = tons PM_{10} per month

sL = road surface silt loading (g/m^2) for each performance test

VMT = Vehicle miles traveled

E. The owner or operator shall update monthly the twelve-month rolling total of PM and PM_{10} emissions by adding up the calculated monthly emissions for the previous twelve months. The plant shall notify DNR immediately if the twelve-month rolling total exceeds 29.90 tons PM or 5.83 tons of PM_{10}.

Authority for Requirement: DNR Construction Permit 05-A-369-S2

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 24.108(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 (IAC). When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 8, 2023 form the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix B.

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 24.108(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 24.105(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 24.108(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 24.108(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 24.108(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 24.108(15)"c"*

G2. Permit Expiration

1. Except as provided in rule 567—24.104(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—24.105(455B). *567 IAC 24.116(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. 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 24.105(2). *567 IAC 24.105*

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 24.107(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 24.108(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 24.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. *567 IAC 24.108 (5)*

G6. Annual Fee

1. The permittee is required under subrule 567 IAC 24.106 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 24.115(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 24.108 (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 24.108 (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 21.8(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 24.108(4), 567 IAC 24.108(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 24;

b. Compliance test methods specified in 567 Chapter 21; 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 24.108(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 21.10(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 21.10(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 21.7(1)-567 IAC 21.7(4)*

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 24.108(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 24.
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—24.140(455B) through 567 - 24.144(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 24.110(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 24.110(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 24.110(1). *567 IAC 24.110(3)*

4. The permit shield provided in subrule 24.108(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 24.110(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 24.108(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 - 24.113(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 24.107(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 24.107(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 24.112(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 24, 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 24.111-567 IAC 24.113*

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. Exceedances 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 24.108(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 24.108(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 24.108(17)"a", 567 IAC 24.108(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 24.114(1)*

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. *567 IAC 24.114(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 24.114(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 24.108 (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 24.108 (8)*

G27. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. *567 IAC 24.108 (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 24.111(1). *567 IAC 24.111 (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 24.3(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 (42 days) 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
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 343-6589

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 21.10(7)"a", 567 IAC 21.10(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
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 313-8325

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
6200 Park Ave
Suite 200
Des Moines, IA 50321
(515) 725-0268

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

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

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

V. Appendix A – Links to Standards

A. 40 CFR Part 60 Subpart A- General Provisions
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A

B. 40 CFR Part 60 Subpart Db- Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Db

C. 40 CFR Part 60 Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Kb

D. 40 CFR Part 60 Subpart DD – Standards of Performance for Grain Elevators.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-DD

E. 40 CFR Part 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII

F. 40 CFR Part 60 Subpart VV- Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VV

G. 40 CFR Part 63 Subpart A- General Provisions
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A

H. 40 CFR Part 63 Subpart ZZZZ- Standards of Performance for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ

VI. Appendix B – IAC EO10 Code Changes Crosswalk

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	Scope of Title - Definitions	N/A	**Definitions moved** to Ch. 21, 22 and 23. **Rescinded** Ch. 20. (Reserved)
21	**21**	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	**Kept and combined** with rules from Chapters 24, 25, 26, and 29.
22	**22**	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS). **Moved operating permit rules** to Chapter 24.
22.100 - 22.300(12)	**(New) 24**	N/A	Operating Permits	**Moved operating permit rules** from Ch. 22 to Ch. 24.
23	**23**	Emission Standards	Air Emission Standards	**Kept**
24	**(New) 21**	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Moved TV rules** here (to Ch. 24)**.**
25	**(New) 21**	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 25. (Reserved)
26	**(New) 21**	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 26. (Reserved)
27	**27**	Local Program Acceptance	Local Program Acceptance	**Kept**
28	**22**	NAAQS	N/A	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
29	**(New) 21**	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 29. (Reserved)
30	**30**	Fees	Fee	**Kept**
31	**31**	Nonattainment Areas	Nonattainment New Source Review	**Kept**
32	**N/A**	AFO Field Study	N/A	**Rescinded** Ch. 32. (Reserved)
33	**33**	Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)	**Kept**
34	**N/A**	Emissions Trading-CAIR-CAMR	N/A	**Rescinded** Ch. 34. (Reserved)
35	**N/A**	Grant Assistance Programs	N/A	**Rescinded** Ch. 35. (Reserved)

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
20	**20 (Reserved)**	**Scope of Title - Definitions**	**N/A**	**Definitions moved** to Ch. 21, 22 and 23. **Rescinded** Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	

21	**21**	**Compliance**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Kept and combined** with rules from Chapters 24, 25, 26, and 29.
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table

22	**22**	**Controlling Pollution-Permits**	**Controlling Air Pollution - Construction Permitting**	**Kept construction permit rules and combined** with Ch. 20 (definitions) and Ch. 28 (NAAQS). **Moved operating permit rules** to Chapter 24.
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.6	22.6	Nonattainment area designations	Reserved	

Previous Chapter Number (Prior to 5/15/2024)	**Current Chapter Number**	**Previous Title and Description (Prior to 5/15/2024)**	**Current Title and Description**	**Actions Taken**
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed
22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed

22.100 - 22.300(12)	**(New) 24**	**N/A**	**Operating Permits**	**Moved operating permit rules** from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates

22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off-permit revisions)	Changes allowed without a Title V permit revision (off-permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program—definitions	Acid rain program—definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications—requirement to apply	Acid rain applications—requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.129	24.129	Information requirements for acid rain permit applications	Information requirements for acid rain permit applications	Moved from Ch. 22, no changes to rule text
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text

22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification—annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification—units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.300	24.300	Operating permit by rule for small sources	Operating permit by rule for small sources	Moved from Ch. 22, no changes to rule text

Previous Chapter Number (Prior to 5/15/2024)	Current Chapter Number	Previous Title and Description (Prior to 5/15/2024)	Current Title and Description	Actions Taken
23	23	Emission Standards	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the "bubble concept")	Reserved	Removed

24	**(New) 21**	**Excess Emissions**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Moved operating permit rules** here (to Ch. 24)**.**
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated

25	**(New) 21**	**Emissions Measurement**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 25. (Reserved)
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated

26	**(New) 21**	**Emergency Air Pollution Episodes**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table

Ch 26Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
Previous Chapter Number (Prior to 5/15/2024)	**Current Chapter Number**	**Previous Title and Description (Prior to 5/15/2024)**	**Current Title and Description**	**Actions Taken**
27	27	Local Program Acceptance	Local Program Acceptance	Kept
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated

28	**22**	**NAAQS**	**N/A**	**Moved rules and combined** with Ch. 22. **Rescinded** Ch. 28. (Reserved)
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	**Moved from Ch. 28**, minor language updated **Rescinded** Ch. 28. (Reserved)

29	**(New) 21**	**Opacity Qualifications**	**Compliance, Excess Emissions, and Measurement of Emissions**	**Moved rules and combined** with Ch. 21. **Rescinded** Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated

30	**30**	**Fees**	**Fee**	**Kept**
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed

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31	**31**	**Nonattainment Areas**	**Nonattainment New Source Review**	**Kept**
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed

32	**N/A**	**AFO Field Study**	**N/A**	**Rescinded** Ch. 32. (Reserved)
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed

33	**33**	**Special regulations and construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD) of air quality**	**Construction permit requirements for major stationary sources—Prevention of significant deterioration (PSD)**	**Kept**
33.1	33.1	Purpose	Purpose	Kept, some language updated
33.2	33.2	Reserved	Reserved	Kept
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept

33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated

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34	**N/A**	**Emissions Trading-CAIR-CAMR**	**N/A**	**Rescinded** Ch. 34. (Reserved)
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed
34.201	N/A	CAIR NOx annual trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.206	N/A	CAIR NOx allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.207	N/A	CAIR NOx allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed
34.208	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed
34.224	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed

34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.229	N/A	CAIR NOx ozone season opt-in units - rescinded	N/A	Rescinded, reserved, and language removed
34.230 - 34.299	N/A	Reserved	N/A	Rescinded, reserved, and language removed
34.300	N/A	Provisions for air emissions trading and other requirements for the Clean Air Mercury Rule (CAMR) - rescinded	N/A	Rescinded, reserved, and language removed
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed
34.302	N/A	Hg designated representative for Hg budget sources - rescinded	N/A	Rescinded, reserved, and language removed
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.306	N/A	Hg allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed

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34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed

35	**N/A**	**Grant Assistance Programs**	**N/A**	**Rescinded** Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms	N/A	Rescinded, reserved, and language removed
35.6	N/A	Project selection	N/A	Rescinded, reserved, and language removed
35.7	N/A	Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A	Type of financial assistance	N/A	Rescinded, reserved, and language removed
35.9	N/A	Term of loans	N/A	Rescinded, reserved, and language removed
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed
35.16	N/A	Financial assistance denial	N/A	Rescinded, reserved, and language removed