Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: Central Iowa Renewable Energy (CORN), LP
Facility Location: 1303 Highway 3 East, Goldfield, IA 50542
Air Quality Operating Permit Number: 10-TV-004R3
Expiration Date: 6/4/2030

Permit Renewal Application Deadline: 12/4/2029

EIQ Number: 92-3132
Facility File Number: 99-05-003

Responsible Official
Name: Chris Boshart
Title: General Manager
Mailing Address: PO Box 168, Eagle Grove, IA 50533
Phone #: (515) 825-3161

Permit Contact Person for the Facility
Name: Jennifer Etheredge
Title: Process Manager
Mailing Address: 1303 Highway 3 East, P.O. Box 280, Goldfield, IA 50542
Phone #: (515) 825-9607

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 6/05/2025

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
DDGS.....distillers dried grains with solubles
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
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
$PM_{2.5}$ .....particulate matter two point five 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: Central Iowa Renewable Energy (CORN), LP
Permit Number: 10-TV-004R3
Facility Description: Ethanol Fuel Production (SIC 2869)

Equipment List

Emission Point Number	Emission Unit Number	Emission Unit Description	DNR Construction Permit Number
EP-S10	EU-P10	Backup Natural Gas Boiler	05-A-125-S12
EP-S18	EU-P18	Grain handling, storage	05-A-099-S6
EP-S20	EU-P20	Grain Unloading	05-A-100-S10
EP-S22	EU-P22.1	2 Grain Receiving Bins	19-A-615-S2
	EU-P22.2	2 Elevator Legs	
	EU-P22.3	Storage Bin	
EP-S24	EU-P22.1	2 Grain Receiving Bins	20-A-033-S1
	EU-P22.2	2 Elevator Legs	
	EU-P22.3	Storage Bin	
EP-S23	EU-P23	Scalping & Weighing	19-A-616-S1
	EU-P21a	Corn Storage Bin	
EP-S30	EU-P30, EU-P30A	Hammermilling	05-A-101-S6
EP-S31	EU-P31, EU-P32	Hammermill #3	17-A-475-S2
EP-S40	EU-P40	Fermentation Process	05-A-109-S7
	EU-P41	Beer Degas System	
EP-S50	EU-P50,P100	Ethanol Loadout	05-A-113-S5
EP-S61	EU-T61	Denatured Ethanol Storage Tank #1	05-A-102-S4
EP-S62	EU-T62	Denatured Ethanol Storage Tank #2	05-A-103-S4
EP-S63	EU-T63	200 Proof Ethanol Storage Tank	05-A-104-S3
EP-S64	EU-T64 (P64)	Denaturant Storage Tank	05-A-105-S3
EP-S65	EU-T65	190 Proof Ethanol Storage Tank	05-A-106-S3
EP-S66	EU-T66	Additive Storage Tank	05-A-107-S2
EP-S70	EU-P70	DDGS Cooler	05-A-115-S7
EP-S71	P-71	High Protein Meal Transfer	22-A-226
EP-S80	EU-P80	Cooling Tower	05-A-112-S4
EP-S90	EU-P90	DDGS/Protein Meal Loadout	05-A-116-S8
EP S91	S91A	High Protein Storage Bin (2)	22-A-227
	S91B	High Protein Conveyance	
EP-S110	EU-P110	300 hp Fire Pump	05-A-111-S2
EP-F81	EU-F81	Fugitive Dust Emissions from Truck Traffic	05-A-108-S7
EP-F120	EU-F120	VOC Emissions from Equipment Leaks	05-A-110-S1
EP-S160	EU-F160	Wet & Modified DGS Storage	09-A-130-S1
EP-S170	EU-P170A	Distillation/DDGS Dryers	17-A-032-S1
EP S171	P170A	Distillation Process Additions/RTO Bypass	22-A-228
EP-S180	EU-P180	Natural Gas Boiler	17-A-033-S2

Insignificant Activities Equipment List

Insignificant Emission Unit Number	Insignificant Emission Unit Description
P10-TSTV	Thin Stillage Tank Vent
P10-STV	Syrup Tank Vent
P10-CWTV	Cook Water Tank Vent
P10-LTI	Liquifaction Tank #1
P10-WSTV	Whole Stillage Tank Vent
P10-COR	Corn Oil Recovery
P10-FPSV	Fermenter PSVs
AMU	Air Makeup Unit
BF-195320	Centrate Discharge 1
BF-126520	Centrate Discharge 2

II. Plant-Wide Conditions

Facility Name: Central Iowa Renewable Energy (CORN), LP
Permit Number: 10-TV-004R3

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

Permit Duration

The term of this permit is: Five years from permit issuance.
Commencing on: 6/5/2025
Ending on: 6/4/2030

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 24. For sources constructed, modified or reconstructed on or after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from the equation provided in 23.3(2)"a"(2) or amount specified in a permit if based on an emission standard of 0.1

grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a"

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

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

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

---

40 CFR 60 Subpart A Requirements
This facility is subject to 40 CFR 60 Subpart A – General Provisions. The affected emission units are P10, P40, P41, T61-T65, F120 and P180.
See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart A
567 IAC 23.1(2)

40 CFR 60 Subpart Db Requirements
This facility is subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. The affected emission units are P10 and P180.
See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart Db
567 IAC 23.1(2)"ccc"

40 CFR 60 Subpart Kb Requirements
This facility is subject to the Standards of Performance for Volatile Organic Liquid storage vessels (including petroleum liquids) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984. The affected emission units are T61-T65.
See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart Kb
567 IAC 23.1(2)"ddd"

40 CFR 60 Subpart DD Requirements
This Facility is subject to the Standards of Performance for Grain Elevators. The affected units are P22.1- P22.2, P22.3, P23, and P21a. See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart DD
567 IAC 23.1(2)"ooo"

40 CFR 60 Subpart VV Requirements
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 on or Before November 7, 2006. The affected emission units are P40, P41, T61-T65 and F120.
See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 60 Subpart VV
567 IAC 23.1(2)"nn"

40 CFR 63 Subpart A Requirements
This facility is subject to 40 CFR 63 Subpart A – General Provisions.
See Appendix A for link to the Standard. The affected emission unit is P110.
Authority for Requirement: 40 CFR 63 Subpart A
567 IAC 23.1(4)

40 CFR 63 Subpart ZZZZ Requirements
This facility is subject to National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The affected emission unit is P110.
See Appendix A for link to the Standard.
Authority for Requirement: 40 CFR 63 Subpart ZZZZ
567 IAC 23.1(4)"cz"

III. Emission Point Specific Conditions

Facility Name: Central Iowa Renewable Energy (CORN), LP
Permit Number: 10-TV-004R3

Emission Point ID Number: EP-S10

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
P10	Backup Natural Gas Boiler	Natural Gas and/or Process Gas	240 MMBtu/hour	05-A-125-S12

Exhaust gases from the following equipment are vented to the Backup Natural Gas Boiler (EU-P10) before exiting through Emission Point S10 ***only*** during periods when the Regenerative Thermal Oxidizer (CE-170) is not operating:

Emission Unit	Maximum Capacity
Steam Tube Dryer A, B, & C	80,000 lbs of steam/hr (per dryer)
Centrate Tank	1,200 gallons
Centrifuges	1,000 gallons/minute
200 Proof Condenser	152 gallons ethanol/minute
190 Proof Condenser	9,600 gallons per hour
CIP Screen	250 gallons/minute
Slurry Tank #1 (TF-2203)	17,000 gallons
Slurry Tank #2 (TF-2204)	17,000 gallons
Yeast Propagation Tank #1 (TS-3601)	13,500 gallons
Yeast Propagation Tank #2 (TS-3602)	
Slurry Blender (MB-2202)	1,200 gallons/minute
Rectifier Column	36,000 gallons/hr
6 Molecular Sieves	9,000 gallons/hr (each)
8 Evaporators	22,000 gallons/hr (each)

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-125-S12
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.74 lb/hr [(2)]; 0.74 tons/year [(3)], 0.2 lb/MMBtu
Authority for Requirement: DNR Construction Permit 05-A-125-S12
567 IAC 23.3(2)"b"(3)

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.14 lb/hr [(2)]; 0.06 tons/year [(3)]; 500 ppmv
Authority for Requirement: DNR Construction Permit 05-A-125-S12
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 22.86 lb/hr [(2)]; 9.68 tons/year [(3)]
Authority for Requirement: DNR Construction Permit 05-A-125-S12

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 1.26 lb/hr [(2)]; 0.53 tons/year [(3)]
Authority for Requirement: DNR Construction Permit 05-A-125-S12

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 19.20 lb/hr [(2)]; 8.12 tons/year [(3)]
Authority for Requirement: DNR Construction Permit 05-A-125-S12

[(2)] Based on a natural gas usage limit of 193.5 million cubic feet per 12-month rolling period; a maximum heat input capacity of 240 million Btu per hour; and a natural gas average high heating value of 1,050 Btu per cubic feet.
[(3)] Based on a natural gas usage limit of 193.5 million cubic feet per 12-month rolling period.

NSPS Applicability

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
P10	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Natural gas combustion	23.1(2)"ccc"	§60.40b – §60.49b

Authority for Requirement: DNR Construction Permit 05-A-125-S12

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Equipment Operation and Fuel Usage Requirements

A. The Backup Natural Gas Boiler (EU P10) shall be limited to firing on natural gas only.
B. The total amount of natural gas used by the Backup Natural Gas Boiler (EU P10) shall not exceed 193.5 million cubic feet per rolling twelve-month period.
    i. The owner or operator shall record the total amount of natural gas, in million cubic feet, used by the Backup Natural Gas Boiler (EU P10) on a monthly basis.
    ii. The owner or operator shall calculate and record the total amount of natural gas, in million cubic feet, used by the Backup Natural Gas Boiler (EU P10) on a rolling 12-month basis.
C. The owner or operator shall operate Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180 simultaneously *only* during periods of startup and shutdown, Regenerative Thermal Oxidizer (CE170) malfunction, and required testing/tuning certification of the boilers. The simultaneous operation of the boilers is limited to a total heat input capacity of no more than 0.283 MMcf (natural gas) per hour for both boilers combined.
    i. The owner or operator shall maintain the following records for each time that Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180 are operated simultaneously:
        1) Calendar date;
        2) The number of hours of operation; and,
        3) Total amount of natural gas, in million cubic feet, used by Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180, combined.
D. In addition to generating steam, the owner or operator may operate Backup Natural Gas Boiler EU P10 to control air emissions from the equipment described in the "Associated Equipment" section above *only* during periods when the Regenerative Thermal Oxidizer (CE170) associated with Emission Point S170 is not in operation.
    i. The owner or operator shall maintain the following records for each time Backup Natural Gas Boiler EU P10 is operated as described in Condition D:
        1) Calendar date;
        2) Reason(s) why the Regenerative Thermal Oxidizer (CE170) was not

operating; and,

3) The number of hours that Backup Natural Gas Boiler EU P10 operated.

New Source Performance Standards Requirements

E. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.

i. The owner or operator shall comply with the reporting and recordkeeping requirements as outlined in 40 CFR §60.49b, including, but not limited to the following:

1) Per 60.49b(d)(1), the owner or operator shall record and maintain records of the amount of fuel combusted during each day that Backup Natural Gas Boiler, EU P10, operates and calculate the annual capacity factor; or

2) Per 60.49b(d)(2), the owner or operator shall record and maintain records of the amount of fuel combusted during each calendar month.

3) Per 60.49b(p), the owner or operator shall maintain records of the following information for each day that Backup Natural Gas Boiler EU P10 operates:

a) Calendar date;

b) The number of hours of operation; and,

c) A record of the hourly steam load.

4) Per 60.49b(q), the owner or operator shall submit to the Department a report containing the annual capacity factor over the previous twelve (12) months.

a) The owner or operator shall submit the required report once every calendar year.

Authority for Requirement: DNR Construction Permit 05-A-125-S12
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 140
Stack Opening, (inches, dia.): 84
Exhaust Flow Rate (scfm): 88,800
Exhaust Temperature (°F): 410
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-125-S12

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-S18

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P18	Grain Storage Silo #1	Baghouse CE C18	Grain	700,000 bushels	05-A-099-S6
	Grain Storage Silo #2			700,000 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 05-A-099-S6
(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): 0.19 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-099-S6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.19 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-099-S6
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. Grain Storage Silo #1 and Grain Storage Silo #2 shall be filled while aeration fans are locked out (i.e. aeration fans shall not operate during filling operations).
B. The owner or operator shall conduct visible emissions observation on emission point (EP S18) once per day.
    i. If the owner or operator observes visible emissions from EP S18, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.
C. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE18. This log shall include, but is not limited to:

i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-099-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 50
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (scfm): 10,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-099-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.

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-S20

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P20	Grain Unloading/ Receiving Equipment (Truck Dump Pit), Corn Elevator Leg – Headhouse & Internal Handling & Scalper	Baghouse (CE20)	Corn	20,000 bushels/hour	05-A-100-S10
	Corn Day Bin #1			20,000 bushels	
P21a	Corn Bin Storage			6,000 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 05-A-100-S10
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): 0.46 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-100-S10

Pollutant: Particulate Matter (PM) - State
Emission Limit(s): 0.1 gr/dscf; 0.46 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-100-S10
567 IAC 23.4(7)

Operating Requirements and Associated 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.

A. CORN, LP (Plant No. 99-05-003) is limited to receiving/processing 35,215,000 bushels of corn per rolling 12-month period.
   a. The owner or operator shall maintain the following records for each delivery:
      i. The amount of corn in bushels; and,
      ii. Where the corn originated (i.e. local farmer, elevator, cooperative, etc.).

b. The owner or operator shall calculate and record on a daily basis, the total amount of corn delivered to CORN, LP (Plant No. 99-05-003) in bushels.
c. The owner or operator shall calculate and record on a monthly basis, the total amount of corn delivered to CORN, LP in bushels. Calculate and record rolling 12-month totals.

B. The amount of corn received (i.e. originated from) from the Gold Eagle Cooperative-Goldfield site in bushels shall not exceed 50% of the total bushels received at CORN, LP (Plant No. 99-05-003) per rolling 12-month period.
a. The owner or operator shall calculate and record on a daily basis, the total amount of corn delivered to CORN, LP from Gold Eagle Cooperative-Goldfield site in bushels.
b. The owner or operator shall calculate and record on a monthly basis, the total amount of corn delivered to CORN, LP from Gold Eagle Cooperative-Goldfield site in bushels. Calculate and record rolling 12-month totals.
c. The owner or operator shall calculate and record on a monthly basis, the percentage of corn delivered from Gold Eagle Cooperative-Goldfield site using the rolling 12-month totals of corn deliveries.

C. The owner or operator shall conduct visible emissions observation on emission point (S20) once per day.
a. If the owner or operator observes visible emissions from S20, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

D. The owner or operator shall operate and maintain the baghouse (CE C20) according to the manufacturer's recommendations. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C20. This log shall include, but is not limited to:
a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-100-S10

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

Stack Height, (ft, from the ground): 50
Stack Opening, (inches, dia.): 42
Exhaust Flow Rate (scfm): 16,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-100-S10

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-S22 & EP-S24

Associated Equipment

EP#	EU#	Emission Unit Description	Control Equipment	Maximum Design Capacity	Construction Permit
S22	P22.1	2 Grain Receiving Pits	CE22: Baghouse	40,000 bu/hr (combined)	19-A-615-S2
	P22.2	2 Elevator Legs		40,000 bu/hr (combined)	
	P22.3	Storage Bin		40,000 bu/hr; Total storage capacity = 1,206,181 bu	
S24	P22.1	2 Grain Receiving Pits		40,000 bu/hr (combined)	20-A-033-S1
	P22.2	2 Elevator Legs		40,000 bu/hr (combined)	
	P22.3	Storage Bin		40,000 bu/hr; Total storage capacity = 1,206,181 bu	

Raw Material: Grain

Applicable Requirements

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

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

EPs	Pollutant	lb/hr	Other Limits	Authority for Requirement
S22	Opacity	NA	0%[(1)]	567 IAC 23.1(2)"ooo"; NSPS DD
	$PM_{2.5}$	1.08	NA	19-A-615-S2
	PM_{10}	1.08	NA	19-A-615-S2
	Particulate Matter (PM) – Federal	NA	0.01 gr/dscf	567 IAC 23.1(2)"ooo"; NSPS DD
	Particulate Matter (PM) – State	1.08	0.1 gr/dscf	19-A-615-S2, 567 IAC 23.4(7)
S24	Opacity	NA	0% [(1)]	567 IAC 23.1(2)"ooo"; NSPS DD
	$PM_{2.5}$	0.60	NA	20-A-033-S1
	PM_{10}	0.60	NA	20-A-033-S1
	Particulate Matter (PM) – Federal	NA	0.01 gr/dscf	567 IAC 23.1(2)"ooo"; NSPS DD
	Particulate Matter (PM) – State	0.60	0.1 gr/dscf	20-A-033-S1, 567 IAC 23.4(7)

[(1)] Opacity limit per §60.302(b)(2).

Other Limits

EUs	Pollutant	Other Limits	Reference/Basis
P22.1	Opacity	5% [(2)]	567 IAC 23.1(2)"ooo"; NSPS DD

[(2)] Fugitive Opacity limit per §60.302(c)(1).

Authority for Requirement: DNR Construction Permits listed in Table Associated Equipment

NSPS Applicability

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
EU P22.1; EU P22.2	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	Standards of Performance for Grain Elevators	Grain Handling Operations	23.1(2)"ooo"	§60.300 – §60.304

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. CORN, LP (Plant No. 99-05-003) is limited to receiving/processing 35,215,000 bushels of corn per rolling 12-month period.
    a. The owner or operator shall maintain the following records for each delivery:
        i. The amount of corn in bushels; and,
        ii. Where the corn originated (i.e. local farmer, elevator, cooperative, etc.).
    b. The owner or operator shall calculate and record on a daily basis, the total amount of corn delivered to CORN, LP (Plant No. 99-05-003) in bushels.
    c. The owner or operator shall calculate and record on a monthly basis, the total amount of corn delivered to CORN, LP in bushels. Calculate and record rolling 12-month totals.

B. The amount of corn received (i.e. originated from) from the Gold Eagle Cooperative-Goldfield site in bushels shall not exceed 50% of the total bushels received at CORN, LP (Plant No. 99-05-003) per rolling 12-month period.
    a. The owner or operator shall calculate and record on a daily basis, the total amount of corn delivered to CORN, LP from Gold Eagle Cooperative-Goldfield site in bushels.
    b. The owner or operator shall calculate and record on a monthly basis, the total amount of corn delivered to CORN, LP from Gold Eagle Cooperative-Goldfield site in bushels. Calculate and record rolling 12-month totals.
    c. The owner or operator shall calculate and record on a monthly basis, the percentage of corn delivered from Gold Eagle Cooperative-Goldfield site using the rolling 12-month totals of corn deliveries.

C. The owner or operator shall conduct visible emissions observation on emission points (S22 and S24) once per calendar day.
    a. If the owner or operator observes visible emissions from S22 or S24, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

D. The facility shall operate both emission points (S22 and S24) when any of the emission units listed in this permit are in operation.
    a. The facility shall maintain documentation of the operational design of the system.

E. The owner or operator shall operate and maintain the baghouse (CE C22) according to the manufacturer's recommendations. The facility shall maintain a log of all maintenance

and inspection activities performed on the control equipment, CE C22. This log shall include, but is not limited to:

a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permits listed in Table Associated Equipment

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP ID	Stack Height, Feet	Discharge Style	Stack Opening, inches	Stack Temperature, °F	Exhaust Flowrate, SCFM
S22	24.75	Vertical Unobstructed	44	Ambient	42,000
S24	24.75	Vertical Unobstructed	34	Ambient	23,500

Authority for Requirement: DNR Construction Permits listed in Table Associated Equipment

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-S23

Associated Equipment

EU ID	Description	Control Equipment Description and ID	Maximum Rated Capacity	Construction Permit
EU P23	Scalping & Weighing	Baghouse (CE23)	10,000 Bushels/hr	19-A-616-S1
EU P21a	Corn Storage Bin		6,000 Bushels/hr	

Raw Material/Fuel: Corn

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	lb/hr	Other Limits	Authority for Requirement
Opacity	NA	0%[(1)]	567 IAC 23.1(2)"ooo"; NSPS DD
$PM_{2.5}$	0.41	NA	19-A-616-S1
PM_{10}	0.41	NA	19-A-616-S1
Particulate Matter (PM) – Federal	NA	0.01 gr/dscf	567 IAC 23.1(2)"ooo"; NSPS DD
Particulate Matter (PM) – State	0.41	0.1 gr/dscf	567 IAC 23.4(7)

[(1)] Opacity limit per §60.302(b)(2).

Authority for Requirement: DNR Construction Permit 19-A-616-S1

NSPS Applicability

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
EU P23	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	DD	Standards of Performance for Grain Elevators	Grain Handling Operations	23.1(2)"ooo"	§60.300 – §60.304

Authority for Requirement: DNR Construction Permit 19-A-616-S1

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall conduct visible emissions observation on emission point (S23) once per calendar day.
   a) If the owner or operator observes visible emissions from S23, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

B. The baghouse shall be maintained in accordance with the manufacturer's recommendations, including routine and long-term maintenance.

a) Maintain a copy of the baghouse manufacturer's recommendation for the maintenance schedule for the baghouse.

C. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE23. This log shall include, but is not limited to:
   a) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
   b) Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
   c) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 19-A-616-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 15.8
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 9,660
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 19-A-616-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-S30

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P30	Hammermill Feed	Milling Baghouse (CE30)	Corn	3,600 bushels/hour	05-A-101-S6
	Hammermill #1				
	Hammermill #2				
P30A	Rollermill #1			1,710 bushels/hr	
	Rollermill #2				
	Rollermill#3				

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-101-S6
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): 1.52 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-101-S6

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 1.52 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-101-S6
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The two (2) mill systems shall not operate simultaneously except for a maximum of one hour when shutting down one milling system and starting up the other system.
    a. The owner or operator shall record the date and time both milling systems are operated simultaneously.
B. The owner or operator shall conduct visible emissions observation on emission point (S30) once per day.

a. If the owner or operator observes visible emissions from S30, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

C. The owner or operator shall operate and maintain the baghouse (CE C30) according to the manufacturer's recommendations. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C30. This log shall include, but is not limited to:
   a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
   b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
   c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-101-S6

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 300
Stack Opening, (inches, dia.): 32
Exhaust Flow Rate (scfm): 7,600
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-101-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.

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-S31

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P31	Hammermill #3	Baghouse (CE31)	Corn	3,000 bushels/hr	17-A-475-S2
P32	Corn Storage Bin			5,000 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 17-A-475-S2
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.77 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-475-S2
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The differential pressure drop across the Baghouse (CE31) shall be maintained between 0.1 and 10 inches water column. The owner or operator shall collect and record the pressure drop across the Baghouse (CE31), in inches of water, at least once per calendar day. If the pressure drop across the Baghouse (CE31) falls outside the 0.1 to 10 inches water column range, the owner or operator shall investigate and make corrections to the Baghouse (CE31). The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that the Baghouse (CE31) is not in operation.
B. The facility shall maintain a log of all maintenance and inspection activities performed on the Baghouse (CE31). This log shall include, but is not limited to:
    i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; And,

iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 17-A-475-S2

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 17
Stack Opening, (inches, dia.): 22
Exhaust Flow Rate (scfm): 8,985
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 17-A-475-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: EP-S40

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P40	Batch Mash Fermenter #1	CO_2 Scrubber (CE40)	Mash	730,000 gallons	05-A-109-S7
	Batch Mash Fermenter #2			730,000 gallons	
	Batch Mash Fermenter #3			730,000 gallons	
	Batch Mash Fermenter #4			730,000 gallons	
	Batch Mash Fermenter #5			730,000 gallons	
	Batch Mash Fermenter #6			730,000 gallons	
	Beer Well		Beer	985,000 gallons	
P41	Degas System		Process Gas	900 gallons/minute	

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-109-S7
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): 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-109-S7

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.22 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-109-S7
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 11.30 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-109-S7

Pollutant: Hazardous Air Pollutants, Single (SHAP)
Emission Limit(s): 0.80 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-109-S7

Pollutant: Hazardous Air Pollutants, Total (THAP)
Emission Limit(s): 1.40 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-109-S7

NSPS Applicability

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
P40, P41	A	General Provisions	23.1(2)	§60.1 – §60.19
	VV	Standards for Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Constructions, Reconstruction or Modification commenced after January 5, 1981	23.1(2)"nn"	§60.480 – §60.489

Authority for Requirement: DNR Construction Permit 05-A-109-S7

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

A. The CO_2 Scrubber (CE-40) shall maintain an average pressure drop across the wet scrubber greater than 6 inches water column based on a 24-hour averaging period. The owner or operator shall establish alarm setting for the purpose of initiating corrective action procedures based on average pressure drop across the wet scrubber of inches water column based on a 24-hour average.
B. The CO_2 Scrubber (CE-40) shall have a minimum scrubber liquid (water) flow rate which is calculated as 90 percent of the average liquid flow rate at the inlet to the wet scrubber measured during the most recent or any performance test within the last 36 months that demonstrated compliance with all applicable emission limitations. The minimum scrubber liquid (water) flow rate shall be calculated based on a 3-hour rolling average.
C. Any additive added to the scrubber liquid during the compliance testing to enhance the removal efficiency of the scrubber shall be added at a rate greater or equal to the rate demonstrated during the most recent or any performance test within the last 36 months that demonstrated compliance with all applicable emission limitations.
D. The owner or operator shall maintain and operate the control equipment in accordance to manufacturer's specifications (with inspections occurring at a minimum of once per year).

Operating Condition Monitoring and Recordkeeping

A. The owner or operator shall calculate and record the average pressure drop across the scrubber based on a 24-hour average. If the pressure drop deviates below the minimum pressure, the owner or operator shall record the time, date, and actions taken to correct

the situation and also when the parameter is back above the minimum average pressure drop. All excess emission reporting shall be conducted in accordance with General Conditions G14.

B. The owner or operator shall record the scrubber liquid (water) flow rate based on a 3-hour rolling average. If the flow rate deviates below the minimum flow rate, the owner or operator shall record the time, date, and actions taken to correct the situation and also when the parameter is back above the minimum flow rate. All excess emission reporting shall be conducted in accordance with General Conditions G14.
C. The owner or operator shall record the rate of additive added (additive feed rate) to the scrubber liquid on a daily basis. This shall include daily measurement of additive (daily draw down) to verify that the pump additive feed rate is greater than or equal to the additive feed rate demonstrated during the performance tests from the previous 36 months. If the additive feed rate deviates below the rate demonstrated during these performance tests, the owner or operator shall record the time, date, and actions taken to correct the situation and also when the parameter is greater than or equal to the additive rate demonstrated during these performance tests. All excess emission reporting shall be conducted in accordance with General Conditions G14.
D. The owner or operator shall maintain on-site a copy of the performance tests from the previous 36 months detailing scrubber pressure drop, scrubber liquid flow rate, and additive feed rate measured during these performance tests that demonstrated compliance with Emission Limits.
E. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
    a. The date and time any inspection and/or maintenance was performed on the control equipment;
    b. Any issues identified during the inspection;
    c. Any issues addressed during the maintenance activities; and
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 05-A-109-S7

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

Stack Height, (ft, from the ground): 80
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 6,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-109-S7

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.

Compliance Demonstration

Pollutant	Compliance Methodology	Frequency	Test Method
VOC	Stack Testing	Annual (See Note 1)	40 CFR 60, Appendix A, Method 25A and 320
HAP	Stack Testing	Annual (See Note 1)	According to DNR Approved Method

Note 1: Annual testing shall be conducted for VOC, Total HAP, and Single HAP in the months of June, July, or August. Specific HAPs for this source are: acetaldehyde, acrolein, formaldehyde, and methanol.

Authority for Requirement: DNR Construction Permit 05-A-109-S7

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

CAM Plan for EP-S40 Fermentation Process

I. Background

Emissions Unit (EP-S40/CE-40):

Description: Fermentation (process vessels and beer well)
EP ID: EP-S40
Control: Control Device is a Packed Bed Scrubber (ID: CE-40)
Limits: VOC limit – 11.30 lb/hr

II. Monitoring Approach

See Table I

MONITORING APPROACH JUSTIFICATION

A. Background

The fermentation process (EP-S40) at the CORN, LP 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-40). The scrubber controls the pollutants that trigger the CAM requirements, or VOC emissions.

B. Rationale for Selection of Performance Indicators

The rate at which VOC's 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 a minimum of 90 percent of the average flow rate at the inlet to the scrubber measured during the most recent or any performance test within the last 36 months that demonstrated compliance with all applicable emission limitations. Should the water flow rate or chemical injection rate fall below the rates demonstrated during the most recent or any performance test within the last 36 months that demonstrated compliance, corrective measures are taken, the incident is logged, and the incident is reported as required by the Title V Permit.

The water flow 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. The additive rate is monitored by a daily drawdown test by plant personnel. The rate is recorded in the plant's operating log database.

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 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 I Monitoring Approach

	Indicator No. 1	Indicator No. 2	Indicator No. 3
I. Indicator Measurement approach	Water Flow Rate	Additive Injection	Inspection/maintenance (I/M)
	DCS monitors constant water flow rate.	Daily drawdown to monitor additive injection rate.	Detailed inspection twice a year and daily plant walk-throughs.
II. Indicator Range	Water flow rate will be maintained at an average minimum of 90% of the flow rate at the inlet to the scrubber during the most recent or any performance test within the last 36 months that demonstrated compliance with all applicable emissions limitations. Should the indicator fall below the required average flow rate, corrective measures will be made and the incident will be recorded and reported as required.	Chemical injection rate will be maintained at a minimum average injection rate equal to or greater than the rate demonstrated during the most recent or any performance test within the last 36 months that demonstrated compliance with all applicable emissions limitations. Should the indicator fall below the required additive flow rate, corrective measures will be made and the incident will be recorded and reported as required.	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 by plant personnel and recorded in a database.	Detailed inspection twice a year and daily plant walk-throughs.
B. Verification of Operational Status	NA	NA	NA
C. QA/QC Practices and Criteria			Qualified personnel perform inspection.
D. Monitoring Frequency	Constant	Daily	Detailed inspection twice a year and daily plant walk-throughs.
Data Collection Procedures	Constant via DCS	Operations logging database	Records are maintained to Document any excursion or equipment needing maintenance.
Averaging Period	Daily	Daily	NA

Emission Point ID Number: EP-S50

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P50	Truck Ethanol Loadout	Enclosed Flare (CE50) Maximum Heat Input: 6.4 MMBtu/hr	Ethanol	36,000 gallons/hr	05-A-113-S5
P100	Rail Ethanol Loadout			72,000 gallons/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-113-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): 0.05 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-113-S5

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-113-S5
567 IAC 23.3(2) "a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.01 lb/hr; 500 ppmv
Authority for Requirement: DNR Construction Permit 05-A-113-S5
567 IAC 23.3(3) "e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.53 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-113-S5

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 1.29 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-113-S5

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator is limited to a maximum production/loadout (loadout by truck or rail) of 90 million gallons of ethanol (denatured and undenatured) per twelve month rolling period at CORN, LP (Plant No. 99-05-003).
    a. On a monthly basis, the owner or operator shall keep records of the amount of denatured ethanol produced/loaded out at CORN, LP (Plant No. 99-05-003) in gallons.
    b. The owner or operator shall monthly calculate and record the rolling 12-month total amount of denatured ethanol produced/loaded out at CORN, LP.

B. The owner or operator is limited to blending a maximum of 3.1 million gallons of denaturant (gasoline) with ethanol per twelve month rolling period at CORN, LP (Plant No. 99-05-003).
    a. On a monthly basis, the owner or operator shall keep records of the amount of denaturant (gasoline) used in ethanol blending at CORN, LP (Plant No. 99-05-003) in gallons.
    b. The owner or operator shall monthly calculate and record the rolling 12-month total amount of denaturant (gasoline) used in ethanol blending at CORN, LP.

C. The flare shall meet the following requirements:
    a. Be designed for and operated with no visible emissions except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours;
    b. Be operated with a flame present at all times product is being loaded;
    c. Be designed to ensure smokeless design; and,
    d. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

D. The owner or operator shall operate and maintain the flare (CE C50) according to the manufacturer's recommendations. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C50. This log shall include, but is not limited to:
    a. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
    b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
    c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-113-S5

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

Stack Height, (ft, from the ground): 25
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 1,520
Exhaust Temperature (°F): 1,800
Discharge Style: Vertical, Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-113-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** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S61 and S62

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T61	Ethanol Storage Tank #1	Internal Floating Roof (C61)	Ethanol (denatured or undenatured)	1,000,000 million gallons	05-A-102-S4
T62	Ethanol Storage Tank #2	Internal Floating Roof (C62)		1,000,000 million gallons	05-A-103-S4

Applicable Requirements

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

No emission limits required at this time.

NSPS Applicability

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
T61, T62	A	General Provisions	23.1(2)	§60.1 – §60.19
	VV	Standards for Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Constructions, Reconstruction or Modification commenced after January 5, 1981	23.1(2)"nn"	§60.480 – §60.489
	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	23.1(2)"ddd"	§60.110b – §60.117b

Authority for Requirement: DNR Construction Permit 05-A-102-S4 and 05-A-103-S4

Operating Requirements and Associated 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.

Operating Limits

A. The owner or operator shall follow the applicable standards of Subpart Kb, 40 CFR 60.112b(a)(1) and inspect as required in 40 CFR 60.113b(a).
B. The owner or operator shall follow the applicable standards of Subpart VV, 40 CFR 60.480 through 40 CFR 60.489.
C. The tanks shall store only ethanol (denatured and undenatured).
D. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).

Reporting and Recordkeeping

A. Record as specified in 40 CFR Part 60 §60.116b(b), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
B. The owner or operator shall follow the applicable recordkeeping and reporting standards of Subpart Kb, 40 CFR 60.115b through 60.116b.
C. As specified in 40 CFR Part 60 §60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
D. The owner or operator shall keep records for Subpart VV as required in 40 CFR 60.486, and reports as required in 40 CFR 60.487.
E. Record annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permit 05-A-102-S4 and 05-A-103-S4
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb
23.1(2)"nn"
40 CFR 60 Subpart VV

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.
Stack Height, (ft, from the ground): 47 (6 vents); 51 (1 vent)
Stack Opening, (inches, dia.): 387 (6 vents); 10 (1 vent)
Exhaust Flow Rate (scfm): Working/Breathing Loss
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal (6 vents); Downward (1 vent)
Authority for Requirement: DNR Construction Permit 05-A-102-S4 and 05-A-103-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** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S63, S64 and S65

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T63	200 Proof Ethanol Tank	Internal Floating Roof (C63)	Ethanol	165,000 gallons	05-A-104-S3
T64	Denaturant Tank	Internal Floating Roof (C64)	Gasoline	165,000 gallons	05-A-105-S3
T66	190 Proof Ethanol Storage Tank	Internal Floating Roof (C65)	Ethanol	165,000 gallons	05-A-106-S3

Applicable Requirements

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

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

No emission limits required at this time.

NSPS Applicability

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
T63, T64, T65	A	General Provisions	23.1(2)	§60.1 – §60.19
	VV	Standards for Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Constructions, Reconstruction or Modification commenced after January 5, 1981	23.1(2)"nn"	§60.480 – §60.489
	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	23.1(2)"ddd"	§60.110b – §60.117b

Authority for Requirement: DNR Construction Permit 05-A-104-S3, 05-A-105-S3, 05-A-106-S3

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

A. The fixed roof in combination with an internal roof shall meet the specifications as stated in 40 CFR Part 60 §60.112b(a)(1).

Reporting and Recordkeeping

A. Record and report as specified in 40 CFR Part 60 §60.115b (a) Reporting and recordkeeping requirements.
B. Record as specified in 40 CFR Part 60 §60.116b (a), the owner or operator shall keep copies of all records required by §60.11b (b) for the life of the source.
C. Record as specified in 40 CFR Part 60 §60.116b (b), the owner or operator shall keep readily accessible records showing the dimension of the storage vessel and analysis showing the capacity of the vessel.
D. As specified in 40 CFR Part 60 §60.116b(c), the owner or operator shall maintain a record of the volume stored, the period of storage, and the maximum true vapor pressure of that volume during the respective storage period.
E. Record annually, the net material throughput in gallons.

Authority for Requirement: DNR Construction Permit 05-A-104-S3, 05-A-105-S3, 05-A-106-S3
567 IAC 23.1(2)"ddd"
40 CFR 60 Subpart Kb

Emission Point Characteristics

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 34 (4 vents); 38(1 vent)
Stack Opening, (inches, dia.): 380 (4 vents); 10 (1 vent)
Exhaust Flow Rate (scfm): Working/Breathing Loss
Exhaust Temperature (°F): Ambient
Discharge Style: Horizontal (4 vents); Downward (1 vent)
Authority for Requirement: DNR Construction Permit 05-A-104-S3, 05-A-105-S3, 05-A-106-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** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S66

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
T66	Additive Storage Tank	Fixed Roof (C66)	Corrosion Inhibitor	2,300 gallons	05-A-107-S2

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.

No emission limits required at this time.

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

A. Owner or operator is limited to a maximum throughput of 8,000 gallons of additive (Corrosion Inhibitor) per rolling 12-month total in Additive Storage Tank (EU-T66).

Reporting and Recordkeeping

A. Record on a monthly basis, the throughput of additive in Additive Storage Tank (EU-T66) in gallons. Calculate and record rolling 12-month totals.

Authority for Requirement: DNR Construction Permit 05-A-107-S2

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

Stack Height, (ft, from the ground): 8
Stack Opening, (square inches, area): 314.8
Exhaust Flow Rate (scfm): Working/Breathing Loss
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Obstructed
Authority for Requirement: DNR Construction Permit 05-A-107-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: EP-S70

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P70	DDGS Cooler	Baghouse (CE70)	DDGS	24.5 tons of DDGS/hr	05-A-115-S7

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-115-S7
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): 2.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-115-S7

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 2.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-115-S7
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 16.7 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-115-S7

Pollutant: Hazardous Air Pollutants, Single (SHAP)
Emission Limit(s): 0.51 lb/hr (2)
Authority for Requirement: DNR Construction Permit 05-A-115-S7

(2) The specific Individual HAP are acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately and does not represent the sum of these HAPs.

Pollutant: Hazardous Air Pollutants, Total (THAP)
Emission Limit(s): 1.20 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-115-S7

Operating Requirements and Associated 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.

A. The owner or operator shall operate and maintain the baghouse (CE C70) according to the manufacturer's recommendations with inspections occurring at a minimum of once per calendar year. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment. This log shall include, but is not limited to:
   (1) The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
   (2) Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
   (3) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-115-S7

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 36
Exhaust Flow Rate (scfm): 33,000
Exhaust Temperature (°F): 114
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-115-S7

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.

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Stack Testing	Once every 3 years[(1)]	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Stack Testing	Once every 3 years[(1)]	1 hour	40 CFR 51, Appendix M, 201A with 202
VOC[(2)]	Stack Testing	Annual[(3)]	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320
HAP[(4)]	Stack Testing	Annual[(3)]	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320

[(1)]Performance testing shall be conducted once every three (3) years, with the ensuing performance test being completed within three (3) years of the date of the most recent performance test. Should any performance tests demonstrate emission rates (PM or PM_{10}) that are greater than 90% of the applicable emissions limit (i.e., 1.8 lb/hr); the facility shall conduct performance testing on an annual basis. Annual testing shall continue until 3 consecutive tests are less than 1.8 lb/hr, after which testing once every 3 years shall resume.

[(2)]VOC compliance testing may be determined using the sum of the Method 320 or Method 18 results.

[(3)]Performance testing shall be conducted annually with a minimum of three months between compliance tests. Testing of this stack shall be conducted in a manner to verify compliance with all emission limits with all equipment operating in a worst-case scenario.

[(4)]Acetaldehyde, acrolein, formaldehyde, and methanol shall be tested for specifically. With the exception of acetaldehyde, acrolein, formaldehyde, and methanol, any HAP compound that tests below detection limits shall be assumed to be zero.

Authority for Requirement: DNR Construction Permit 05-A-115-S7

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Compliance Assurance Monitoring Plan
CAM Plan for EP-S70 Baghouse

I. Background

A. Emissions Unit:

Description: DDGS Cooler
Identification: EP-S70
Facility: Central Iowa Renewable Energy (CORN), LP
1303 Highway 3 East, P.O. Box 280
Goldfield, IA 50542

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: Permit 05-A-115-S6
Particulate emission limit: 2.00 lb/hr; 0.1 gr/dscf for PM
Opacity emission limit: 40%
Current Monitoring requirements:

1. Maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of baghouse (CE70).
2. If the owner or operator observes visible emissions from S70, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken.
3. Weekly opacity (no visible emissions) readings

C. Control Technology

Control Equipment ID: CE70
CE Description: Fabric filter baghouse

II. Monitoring Approach

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

Table A – Monitoring Approach

	Indicator #1	**Indicator #2**
I. Indicator	Differential pressure across baghouse.	Visible Emissions.
Measurement Approach	Differential pressure measured across the baghouse by a pressure gauge.	Visible emissions from baghouse exhaust while EP-S70 is operating.
II. Indicator Range	An excursion is defined as a differential pressure reading across the baghouse module outside the acceptable range. The acceptable pressure drop range is 0.1 – 10" water column. If the pressure drop measurement falls outside this range, the procedure is to investigate the cause and take necessary corrective actions. Each excursion will trigger an immediate investigation and corrective action. Records of each inspection and corrective action will be kept. The inspection that is triggered is a 6 minute visible emissions observation (similar to Method 22).	An excursion is defined as any visible emission occurring. Excursions trigger an inspection, corrective action, and a recordkeeping requirement. The inspection that is triggered is a 6 minute visible emissions observation (similar to Method 22).
III. Performance Criteria		
A. Data Representativeness	The differential pressure is measured across the baghouse.	Visible emissions observations are made at the emission point.
B. Verification of Operational Status	The pressure gauge will be calibrated, operated, and maintained according to the manufacturer's specifications.	Not applicable.
C. QA/QC Practices and Criteria	Pressure gauges will be calibrated, operated, and maintained according to the manufacturer's specifications.	The observer will be trained by CORN LP to detect visible emissions.
D. Monitoring Frequency	The differential pressure will be inspected a minimum of once per day when the baghouse is operating.	No visible emissions (NVE) observations are made at the emission point on a weekly basis.
E. Data Collection Procedures	Results of baghouse differential pressure checks will be recorded. These records will be kept a minimum of 5 years.	Results of "no visible emissions" observations are recorded and will be kept a minimum of 5 years.

III. Justification

A. Background

DDGS Cooling (EU-S70) at the CORN, LP plant is subject to the Compliance Assurance Monitoring (CAM) requirements as listed in 40 CFR Part 64. The DDGS Cooling baghouse (EP-S70) controls PM, which triggered the CAM requirements.

B. Rationale for Selection of Performance Indicator

The daily pressure drop readings were selected as a performance indicator because they are indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. According to the equipment designer and manufacturer, the design range for the pressure drop in the baghouse with our filter bag media is 0.1 - 10 inches water column. Any excursions outside the 0.1 - 10.0 inches water column range are investigated for cause which may include instrumentation failure, reduced production rate, maintenance, or actual baghouse system failure. Therefore, the detection of too little or excessive pressure drop is used as a performance indicator.

Visual stack inspection is also utilized to ensure proper baghouse operation.

C. Rationale for Selection of Indicator Level

The selected indicator range is the design pressure drop range (0.1 - 10 inches water). If a pressure drop outside the values noted is observed, an inspection and appropriate corrective action will be taken within 8 hours.

The pressure drop range noted above was selected as the indicator range because a pressure drop outside of these values is indicative of a potential increase in particulate emissions due to a decrease in the performance of this baghouse. If the baghouse is operating properly, there will not be a pressure drop less than 0.1 inches of water or greater than 10 inches of water except during start up, shut down, and upset conditions.

The indicator range of no visible emissions was selected because any visible emissions would indicate a performance problem with the baghouse.

The selected QIP threshold for the baghouse is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Emission Point ID Number: EP-S71

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P71	High Protein Meal Transfer	CE C71: Pulse Jet Baghouse	High Protein Meal	45 tons/hr	22-A-226

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 22-A-226
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: $PM_{2.5}$
Emission Limit(s): 1.05 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-226

Pollutant: PM_{10}
Emission Limit(s): 1.05 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-226

Pollutant: Particulate Matter (PM)
Emission Limit(s): 1.05 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 22-A-226
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall conduct visible emissions observation on emission point (S71) once per day.
   i. If the owner or operator observes visible emissions from S71, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

B. The owner or operator shall operate and maintain the baghouse (CE C71) according to the manufacturer's recommendations, with inspections occurring, at a minimum, once per calendar year. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C71. This log shall include, but is not limited to:

i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;

ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,

iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 22-A-226

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 25
Stack Opening, (inches, dia.): 32
Exhaust Flow Rate (scfm): 24,500
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 22-A-226

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-S80

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P80	Cooling Tower, 5 Cells	Demister (CE C80)	Water	1,800,000 gallons/hour; (Total Drift Loss: 0.0042%)	05-A-112-S4

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-112-S4
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 1.60 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-112-S4

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1gr/dscf
Authority for Requirement: DNR Construction Permit 05-A-112-S4
567 IAC 23.3(2)"a"

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

A. The Total Dissolved Solids (TDS) concentration in the cooling water shall not exceed 2,500 parts per million by weight (2,500 mg/L) for any single sampling event.
B. The Cooling Tower (EU P80) shall be maintained according to the manufacturer specifications and maintenance schedule.
C. Chromium based, VOC containing, and HAP containing water treatment chemicals (i.e. biocides, fungicides, scale inhibitors, etc.) shall not be used in the Cooling Tower (EU P80).

Reporting and Recordkeeping

A. The owner or operator shall complete an analysis of the Total Dissolved Solids (TDS) concentration in the cooling water at least once for each calendar quarter that Cooling Tower (EU P80) is in operation.
B. The owner or operator shall maintain a record of all inspections and maintenance and any action resulting from inspections and maintenance of the Cooling Tower (EU P80).
C. The owner or operator shall retain a copy of the Material Safety Data Sheet (MSDS) for each water treatment chemical used in the Cooling Tower (EU P80).

Authority for Requirement: DNR Construction Permit 05-A-112-S4

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33 per cell
Stack Opening, (inches, dia.): 216 inch diameter per cell (cells 1-4); 264 inch diameter (cell 5)
Exhaust Flow Rate (scfm): 532,100 scfm per cell (cells 1-4); 588,000 scfm (cell 5)
Exhaust Temperature (°F): 85
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-112-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** ☒

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S90

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P90	DDGS/Protein Meal Loadout	Baghouse (CE90)	DDGS	220 tons of DDGS/hr[(1)]	05-A-116-S8

[1] The maximum process design capacity is 160 tons per hour of DDGS/Protein Meal, which is based on the removal of the fiber stream prior to fermentation, which is added back to the finished meal product.

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-116-S8
567 IAC 23.3(2)"d"

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

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.24 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-116-S8

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.24 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-116-S8
567 IAC 23.4(7)

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 2.0 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-116-S8

Pollutant: Hazardous Air Pollutants, Single (SHAP)
Emission Limit(s): 0.08 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-116-S8

Pollutant: Hazardous Air Pollutants, Total (THAP)
Emission Limit(s): 0.12 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-116-S8

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.

A. The owner or operator is limited to a maximum production/loadout of 241,500 tons of meal product (i.e., DDGS and High Protein Meal) per twelve month rolling period at CORN, LP (Plant No. 99-05-003).
   i. The owner or operator shall monthly record the amount of meal product (i.e., DDGS and High Protein Meal) loaded out at CORN, LP (Plant No. 99-05-003), in tons.
   ii. The owner or operator shall monthly calculate and record the rolling 12-month total amount of meal product (i.e., DDGS and High Protein Meal) loaded out at CORN, LP.

B. No more than 50 percent of the DDGS produced at CORN, LP (Plant No. 99-05-003) shall be transferred or shipped to Gold Eagle Cooperative (Feed Mill) – Goldfield.
   i. Record on a daily basis, the total amount of DDGS delivered from CORN, LP to Gold Eagle Cooperative (Feed Mill) – Goldfield in tons.
   ii. Record on a monthly basis, the total amount of DDGS delivered from CORN, LP to Gold Eagle Cooperative (Feed Mill) – Goldfield in tons. Calculate and record rolling 12-month totals.
   iii. Calculate and record on a monthly basis, the percent of DDGS delivered from CORN, LP to Gold Eagle Cooperative (Feed Mill) – Goldfield using the rolling 12-month totals.

C. The owner or operator shall conduct visible emissions observation on emission point (S90) once per day.
   i. If the owner or operator observes visible emissions from S90, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

D. The owner or operator shall operate and maintain the baghouse (CE C90) according to the manufacturer's recommendations. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C90. This log shall include, but is not limited to:
   i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
   ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
   iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 05-A-116-S8

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

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 14
Exhaust Flow Rate (scfm): 1,200
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 05-A-116-S8

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-S91

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P91A	2 – High Protein Storage Bins	CE C91: Pulse Jet Baghouse	High Protein Meal	502 tons (each)	22-A-227
P91B	High Protein Meal Conveyance			309 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 22-A-227
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: $PM_{2.5}$
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-227

Pollutant: PM_{10}
Emission Limit(s): 0.26 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-227

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.26 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 22-A-227
567 IAC 23.4(7)

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator shall conduct visible emissions observation on emission point (S91) once per day.
   i. If the owner or operator observes visible emissions from S91, the owner or operator shall investigate the emission unit or control equipment and make corrections to the

associated operations or equipment. The owner or operator shall maintain a record of all corrective actions taken. This requirement shall not apply on the days that this emission unit is not in operation.

B. The owner or operator shall operate and maintain the baghouse (CE C91) according to the manufacturer's recommendations, with inspections occurring, at a minimum, once per calendar year. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE C91. This log shall include, but is not limited to:
   i. The date and time any inspection and/or maintenance was performed on the emission unit and/or control equipment;
   ii. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
   iii. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved.

Authority for Requirement: DNR Construction Permit 22-A-227

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 25
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 6,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: DNR Construction Permit 22-A-227

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-S110

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
P110	Fire Pump Engine	Diesel	300 hp (14.2 gallons of diesel fuel/hour)	05-A-111-S2

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-111-S2
567 IAC 23.3(2)"d"

[(1)]An exceedance of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 0.90 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-111-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.1 gr/dscf; 0.90 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-111-S2
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 0.41 lb/hr; 2.5 lb/MMBtu[(2)]
Authority for Requirement: DNR Construction Permit 05-A-111-S2
567 IAC 23.3(3)"b"(2)

[(2)] 2.5 pounds of sulfur dioxide, replicated maximum three-hour average, per million Btu of heat input.

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 11.20 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-111-S2

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 0.89 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-111-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 2.40 lb/hr
Authority for Requirement: DNR Construction Permit 05-A-111-S2

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

A. Diesel Fire Pump (EU-P110) is limited to firing on diesel fuel with a maximum sulfur content of 0.2 percent by weight.
B. Diesel Fire Pump (EU-P110) shall not operate more than 50 hours per rolling twelve-month period.

Reporting and Recordkeeping

A. Record on a monthly basis, the number of hours Diesel Fire Pump (EU-P110) is operated. Calculate and record rolling 12-month totals.
B. Retain fuel supplier's certification of the sulfur content contained within diesel fuel fired in Diesel Fire Pump (EU-P110) as a percent by weight.

Authority for Requirement: DNR Construction Permit 05-A-111-S2

NESHAP Applicability

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

Compliance Date

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

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

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

6. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

Operating Limits 40 CFR 63.6640(f)

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

Recordkeeping Requirements 40 CFR 63.6655

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

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

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

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 8
Stack Opening, (inches, dia.): 3
Exhaust Flow Rate (scfm): 1,740
Exhaust Temperature (°F): 770
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 05-A-111-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: EP-F81

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
F81	Fugitive Dust Emissions from Truck Traffic	CE F81: Paved Road Sweeping and Water Flushing	Silt	NA	05-A-108-S7

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): (1)
Authority for Requirement: DNR Construction Permit 05-A-108-S7
567 IAC 23.3(2)"c"(1)
(1) The owner or operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): (2)
Authority for Requirement: DNR Construction Permit 05-A-108-S7
(2) Emissions are limited based on an average vehicle weight of 29.0 tons, silt content of 3.4 grams per square meter, and all raw material/product is shipped or received by truck.

Pollutant: Particulate Matter (PM)
Emission Limit(s): (2)
Authority for Requirement: DNR Construction Permit 05-A-108-S7
(2) Emissions are limited based on an average vehicle weight of 29.0 tons, silt content of 3.4 grams per square meter, and all raw material/product is shipped or received by truck.

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The haul road surface silt loading shall not exceed 3.4 g/m^2.
B. Cleaning of the haul roads shall be done at least once per calendar month. All sweeping must be completed with an Elgin Crosswind GE Sweeper or functionally equivalent sweeper type. If sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than 35^o F (1.7^o C) or conditions due to weather, could create hazardous driving conditions, then the sweeping shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sweeping have abated.
    a. Sweeping need not occur when a paved road(s) will not be used for that calendar

month.

b. There shall be a minimum of 14 calendar days between each monthly sweeping event.
c. The owner or operator shall record the frequency of cleaning performed on the haul roads. If the roads are not cleaned due to weather, a written record must be kept on site outlining the conditions.
d. The owner or operator shall record the type of cleaning (i.e. sweeping, washing, etc.) performed on the haul road. If sweeping is performed an Elgin Crosswind GE Sweeper or functionally equivalent sweeper type shall be used.

C. Performance testing on the haul road surface silt loading shall be completed at least four (4) times per calendar year. For each performance test, silt loading sampling shall be done for at least 3 different locations. The three sampled locations shall then be averaged to determine the silt loading average results. Silt load testing shall be conducted according to the procedures outlined in AP-42, Appendix C.1 Procedures for Sampling Surface / Bulk Dust Loading.
    a. Performance testing (silt load sampling) shall be completed no earlier than seven (7) calendar days prior to a monthly sweeping event.
    b. Should any monthly test exceed 90% of 3.4 g/m^2 (3.0 g/m^2), the facility shall complete cleaning of the haul roads with a sweeper as described in Permit Condition B within 48 hours of the collecting the silt load test data, as weather permits.
    c. If monthly silt load testing cannot be accomplished because conditions due to weather (i.e., the ambient air temperature (as measured at the facility during daylight operating hours) is considered extreme or precipitation events) could create hazardous conditions or affect test results, then the sampling shall be postponed and accomplished as soon after the scheduled date as the conditions preventing the sampling have abated
    d. There shall be a minimum of 45 days between the required minimum of four (4) silt loading tests (i.e., the facility is allowed to conduct additional silt load tests that would off-set this requirement).
D. The owner or operator shall maintain a log of each silt load sampling event that contains, at a minimum, the following:
    a. The date of silt load sampling event;
    b. The location of the sample taken;
    c. The measured silt content in grams;
    d. Sample area used for silt load sampling in meters; and,
    e. The operator's initials.
E. Best Management Practices (BMP) – Clean up spills, truck scale areas, etc. CORN, LP shall implement "good housekeeping" or best management practices to minimize fugitive emissions. Such practices include but are not limited to:
    a. Clean up spills of raw materials or product on the haul road surface as expeditiously as possible and in a manner consistent with good practice for minimizing emissions.
    b. Complete weekly housekeeping around truck scale areas and loading / loadout areas.
    c. Traffic on the haul roads shall not exceed 20 mph. Maintain and post speed limit signs.

d. All haul roads at the facility shall be paved.
e. Haul truck loads shall be enclosed or covered.

Authority for Requirement: DNR Construction Permit 05-A-108-S7

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

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
F120	VOC Emissions from Equipment Leaks	VOC	NA	05-A-110-S1

Applicable Requirements

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

Pollutant: Hazardous Air Pollutants, Single (SHAP)
Emission Limit(s): 0.80 ton/yr
Authority for Requirement: DNR Construction Permit 05-A-110-S1

Pollutant: Hazardous Air Pollutants, Total (THAP)
Emission Limit(s): 0.91 ton/yr
Authority for Requirement: DNR Construction Permit 05-A-110-S1

NSPS Applicability

EU ID	Subpart	Title	State Reference (567 IAC)	Federal Reference (40 CFR)
F120	A	General Provisions	23.1(2)	§60.1 – §60.19
	VV	Standards for Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Constructions, Reconstruction or Modification commenced after January 5, 1981	23.1(2)"nn"	§60.480 – §60.489

Authority for Requirement: DNR Construction Permit 05-A-110-S1

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Operating Limits

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

Reporting and Recordkeeping

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

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

Authority for Requirement: DNR Construction Permit 05-A-110-S1
567 IAC 23.1(2)"nn"
40 CFR 60 Subpart VV

Monitoring Requirements

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

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Method
VOC	Testing	As specified in NSPS VV Leak Detection Program. Frequency varies with component type (weekly, monthly, etc.)	NSPS Subpart VV

Authority for Requirement: DNR Construction Permit 05-A-110-S1

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-S160

Associated Equipment

Emission Unit	Emission Unit Description	Raw Material	Rated Capacity	Construction Permit
F160	Wet & Modified DGS Storage	WDGS & MDGS	NA	09-A-130-S1

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): (1)
Authority for Requirement: DNR Construction Permit 09-A-130-S1
(1) The owner/operator shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond lot line of the property.

Operational Limits & Reporting/Record keeping Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. The owner or operator (CORN, LC, Plant No. 99-05-003) is limited to producing a maximum of 74,160 tons of Wet DGS and Modified DGS, combined, per rolling 12-month period.
    a. On a monthly basis, the owner or operator shall calculate and record the total amount of Wet DGS and Modified DGS, combined, produced, in tons.
    b. On a monthly basis, the owner or operator shall calculate and record the twelve-month rolling total amount of Wet DGS and Modified DGS, combined, produced, in tons.

Authority for Requirement: DNR Construction Permit 09-A-130-S1

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

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

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

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

Authority for Requirement: 567 IAC 24.108(3)

Emission Point ID Number: EP-S170

Associated Equipment

The following equipment is vented through RTO (CE 170) to emission point (S170):

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P170A	Steam Tube Dryer A, B, & C	Regenerative Thermal Oxidizer (CE170) Rated Capacity: 8.74 MMBtu/hour Natural Gas	Process Gas	80,000 lbs of steam/hour (per dryer)	17-A-032-S1
	Centrate Tank		Centrate	1,200 gallons	
	200 Proof Condenser		Ethanol	152 gallons ethanol/minute	
	190 Proof Condenser		Ethanol	9,600 gal/hr	
	CIP Screen		CIP	250 gal/min	
	Slurry Tank #1 (TF-2203)		Mash	17,000 gallons	
	Slurry Tank #2 (TF-2204)		Mash	17,000 gallons	
	Yeast Propagation Tank #1 (TS-3601)		Yeast	13,500 gallons	
	Yeast Propagation Tank #2 (TS-3602)				
	Slurry Blender (MB-2202)		Mash	1,200 gal/min	
	Rectifier Column		Ethanol	36,000 gal/hr.	
	6 Molecular Sieves		Ethanol	9,000 gal/hr. (each)	
	8 Evaporators		Thin Stillage	22,000 gal/hr. (each)	
	5 – Mechanical Separators		Mash	400 gal/min (each)	
	4 – Mechanical Separators		Mash	175 gal/min (each)	
	2 – 3rd Effect Evaporators		Thin Stillage	700 gal/min (each)	
	200 Proof Condenser #2		Ethanol	200 gal/min	
	Mix Tanks A – C		Ethanol	14,000 gal (each)	
	Mix Tank D		Ethanol	3,000 gallons	
	Collection Tanks A – C		Ethanol	2,900 gal (each)	
	Collection Tank D		Ethanol	2,600 gallons	
	Collection Tanks E & F		Ethanol	2,900 gal (each)	
	Blower A & B		Ethanol	1200 cfm (each)	
	Blower C		Ethanol	1500 cfm (each)	

Max Rated Capacity: Beer Feed = 1030 gal/min

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 % [(1)]
Authority for Requirement: DNR Construction Permit 17-A-032-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 ($PM_{2.5}$)
Emission Limit(s): 4.97 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-032-S1

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 4.97 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-032-S1

Pollutant: Particulate Matter (PM)
Emission Limit(s): 4.97 lb/hr; 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 17-A-032-S1
567 IAC 23.1(2)"a"

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 17-A-032-S1
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_x)
Emission Limit(s): 1.19 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-032-S1

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 10.0 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-032-S1

Pollutant: Hazardous Air Pollutants, Single (SHAP)
Emission Limit(s): 0.50 lb/hr [(2)]
Authority for Requirement: DNR Construction Permit 17-A-032-S1

[(2)] The specific Individual HAP are acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately and does not represent the sum of these HAPs.

Pollutant: Hazardous Air Pollutants, Total (THAP)
Emission Limit(s): 1.50 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-032-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.

A. The owner or operator shall operate the Regenerative Thermal Oxidizer (RTO), CE 170, at all times that the equipment it controls is in operation, except for a maximum of 100 hours of bypass allowed per rolling 12-month period.
    a. The owner or operator shall monthly record the number of hours the control equipment (Regenerative Thermal Oxidizer), CE 170, is bypassed.
    b. The owner or operator shall monthly calculate and record the rolling 12-month total number of hours the control equipment (Regenerative Thermal Oxidizer), CE 170, is bypassed.
B. During operation, the RTO (CE 170) shall maintain a minimum operating temperature (3-hour average) of 1450 degrees Fahrenheit.
    a. The owner or operator shall properly operate and maintain equipment to continuously monitor the temperature of the RTO. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals or per a written facility-specific operation and maintenance plan.
    b. The owner or operator shall keep hourly records of the operating temperature of the RTO and record all periods (during actual operations) where the 3-hour block average temperature is less than 1450 degrees Fahrenheit. This requirement shall not apply during periods the RTO or the equipment the RTO controls, are not in operation.
C. The DDGS Dryers and the Regenerative Thermal Oxidizer (CE 170) shall only combust natural gas, process off-gasses or a combination of both.
D. The owner or operator shall inspect and maintain the RTO (CE 170) according to the facility's (Plant No. 99-05-003) operation and maintenance plan. The facility shall maintain a log of all maintenance and inspection activities performed on the control equipment, CE 170. This log shall include, but is not limited to:
    a. The date and time any inspection and/or maintenance was performed on the control equipment;
    b. Any issue(s) identified during the inspection and the date each issue(s) was resolved; and,
    c. Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
    d. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 17-A-032-S1

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

Stack Height, (ft, from the ground): 105
Stack Opening, (inches, dia.): 70
Exhaust Flow Rate (scfm): 63,500
Exhaust Temperature (°F): 325
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 17-A-032-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.

Compliance Demonstration Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Stack Testing	Every 36-months(1)	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
PM_{10}	Stack Testing	Every 36-months(1)	1 hour	40 CFR 51, Appendix M, 201A with 202
Opacity	Stack Testing	Every 36-months(1)	1 hour	40 CFR 60, Appendix A, Method 9
VOC	Stack Testing	Every 36-months(1)	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320
Single HAP(2)	Stack Testing	Annual(3)	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320
Total HAP(2)	Stack Testing	Annual(3)	1 hour	40 CFR 60, Appendix A, Method 18 or 40 CFR 63, Appendix A, Method 320

(1) Performance testing shall be conducted once every 36 months, with the ensuing performance test being completed within 36 months of the date of the most recent performance test. Should any performance tests demonstrate emission rates that are greater than 90% of the applicable emissions limit (e.g., PM = 4.47 lb/hr); the facility shall conduct performance testing on an annual basis. Annual testing shall continue until 3 consecutive tests are less than 90% of the applicable emissions limit, after which testing once every 36 months shall resume.
(2) Acrolein, acetaldehyde, formaldehyde and methanol shall be test for specifically.
(3) Performance testing shall be conducted annually with a minimum of 180 days between tests. Testing of this stack shall be conducted in a manner to verify compliance with all emission limits with all equipment operating in a worst case scenario.

Authority for Requirement: DNR Construction Permit 17-A-032-S1

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 for CORN, LP – Goldfield, IA EP S170 – Distillation & DDGS Dryers

I. Background

A. Emissions Unit
Description: Distillation and DDGS Dryers
Identification: EP S170
Facility: CORN, LP Goldfield, Iowa

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

- Regulation No.: IDNR Permit 17-A-032-S1
- VOC emission limit: 10 pounds per hour
- Total HAP emission limit: 1.50 pounds per hour
- Single HAP emission limit: 0.50 pounds per hour
- Current Monitoring requirements: Regenerative Thermal Oxidizer Temperature (3-hour average), control equipment inspections and maintenance according to manufacturer's specifications.

C. Control Technology: Regenerative Thermal Oxidizer

II. Monitoring Approach

A. Indicator
Regenerative Thermal Oxidizer temperature will be used as an indicator.

B. Measurement Approach
Thermal oxidizer temperature will be monitored continuously and recorded in 3-hour averages to ensure that no 3-hour average is less than 1450 degrees F.

C. Indicator Range
Temperature > 1450 degrees F

D. QIP (Quality Improvement Plan) Threshold
The QIP threshold is six excursions in a six month reporting period

E. Performance Criteria

Data representativeness: A decrease in temperature below this threshold would indicate a decrease in destruction efficiency for the regenerative thermal oxidizer and potentially an increase in VOC, THAP, and SHAP emissions.

Verification of operational status: Records of 3–hour average temperatures will be maintained for five years.

QA/QC practices and criteria: The facility shall check the temperature continuously when the emission unit on this emission point is in operation. If a 3-hour average temperature less than 1450 degrees F, corrective action will be taken.

Monitoring frequency and data Collection procedure: Regenerative Thermal Oxidizer temperature shall be monitored continuously during a period when the emission unit on this emission point is in operation. Records of the readings shall be maintained for five years.

III. Justification

A. Background

This facility produces ethanol using a dry mill process. Corn is received stored and processed at the facility prior to being fermented. The exit stream from fermentation is sent through a distillation process to separate the ethanol from the other components. The corn mash that remains is dried in the DDGS Dryers. The regenerative thermal oxidizer controls both the DDGS Dryers and the distillation process.

B. Rationale for Selection of Performance Indicator

The thermal oxidizer temperature was selected as the performance indicator because it is indicative of operation of the RTO in a manner necessary to comply with the VOC, THAP, and SHAP emission standards. A decrease in temperature below the indicator rand would indicate a reduced performance of the regenerative thermal oxidizer.

C. Rationale for Selection of Indicator Level

The selected indicator range is any 3-hour average temperature less than 1450 degrees F. If a 3-hour average temperature below this level is observed, corrective action will be taken.
The selected QIP threshold for the thermal oxidizer is 6 excursions in a 6-month reporting period. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.

Emission Point ID Number: EP-S171 (Bypass)

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P170A	Steam Tube Dryer A, B, & C	Regenerative Thermal Oxidizer (CE170) Rated Capacity: 8.74 MMBtu/hour Natural Gas	Process Gas	80,000 lbs of steam/hour (per dryer)	22-A-228
	Centrate Tank		Centrate	1,200 gallons	
	200 Proof Condenser		Ethanol	152 gallons ethanol/minute	
	190 Proof Condenser		Ethanol	9,600 gal/hr	
	CIP Screen		CIP	250 gal/min	
	Slurry Tank #1 (TF-2203)		Mash	17,000 gallons	
	Slurry Tank #2 (TF-2204)		Mash	17,000 gallons	
	Yeast Propagation Tank #1 (TS-3601)		Yeast	13,500 gallons	
	Yeast Propagation Tank #2 (TS-3602)				
	Slurry Blender (MB-2202)		Mash	1,200 gal/min	
	Rectifier Column		Ethanol	36,000 gal/hr.	
	6 Molecular Sieves		Ethanol	9,000 gal/hr. (each)	
	8 Evaporators		Thin Stillage	22,000 gal/hr. (each)	
	5 – Mechanical Separators		Mash	400 gal/min (each)	
	4 – Mechanical Separators		Mash	175 gal/min (each)	
	2 – 3rd Effect Evaporators		Thin Stillage	700 gal/min (each)	
	200 Proof Condenser #2		Ethanol	200 gal/min	
	Mix Tanks A – C		Ethanol	14,000 gal (each)	
	Mix Tank D		Ethanol	3,000 gallons	
	Collection Tanks A – C		Ethanol	2,900 gal (each)	
	Collection Tank D		Ethanol	2,600 gallons	
	Collection Tanks E & F		Ethanol	2,900 gal (each)	
	Blower A & B		Ethanol	1200 cfm (each)	
	Blower C		Ethanol	1500 cfm (each)	

Maximum Rated Capacity: Beer Feed = 1,030 gal/min

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%[(1)]
Authority for Requirement: DNR Construction Permit 22-A-228
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: $PM_{2.5}$
Emission Limit(s): 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-228

Pollutant: PM_{10}
Emission Limit(s): 0.50 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-228

Pollutant: Particulate Matter (PM)
Emission Limit(s): 0.50 lb/hr, 0.1 gr/dscf
Authority for Requirement: DNR Construction Permit 22-A-228
567 IAC 23.1(2)"a"

Pollutant: Volatile Organic Compounds (VOC)
Emission Limit(s): 265.0 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-228

Pollutant: Total HAP
Emission Limit(s): 11.0 lb/hr
Authority for Requirement: DNR Construction Permit 22-A-228

Pollutant: Individual HAP
Emission Limit(s): 9.5 lb/hr [(2)]
Authority for Requirement: DNR Construction Permit 22-A-228

[(2)]The specific Individual HAP are acetaldehyde, acrolein, formaldehyde, and methanol. The emission limit applies to each individual HAP separately and does not represent the sum of these HAPs.

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

A. During maintenance activities and emergency situations, emissions from the units listed above are allowed to bypass the Regenerative Thermal Oxidizer (RTO), and vent to this emission point, EP S171) for a maximum of 100 hours per rolling 12-month period.
   i. The owner or operator shall monthly record the number of hours emission are vented through EP S171 (i.e., the Regenerative Thermal Oxidizer, CE 170, is bypassed).
   ii. The owner or operator shall monthly calculate and record the rolling 12-month total number of hours emission are vented through EP S171 (i.e., the Regenerative Thermal Oxidizer, CE 170, is bypassed).

B. The owner or operator shall record the reason emissions were vented through EP S171.

Authority for Requirement: DNR Construction Permit 22-A-228

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft., from the ground): 20
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 24,000
Exhaust Temperature (°F): 150
Discharge Style: Horizontal
Authority for Requirement: DNR Construction Permit 22-A-228

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-S180

Associated Equipment

Emission Unit	Emission Unit Description	Control Equipment	Raw Material	Rated Capacity	Construction Permit
P180	Natural Gas Boiler	Low NO_x Burners (CE180)	Natural Gas	299.2 MMBtu/hour	17-A-033-S2

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 17-A-033-S2
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): 2.22 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-033-S2

Pollutant: Particulate Matter (PM_{10})
Emission Limit(s): 2.22 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-033-S2

Pollutant: Particulate Matter (PM)
Emission Limit(s): 2.22 lb/hr
Authority for Requirement: DNR Construction Permit 17-A-033-S2

Pollutant: Sulfur Dioxide (SO_2)
Emission Limit(s): 500 ppmv
Authority for Requirement: DNR Construction Permit 17-A-033-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO_X)
Emission Limit(s): 14.96 lb/hr, [(2)]
Authority for Requirement: DNR Construction Permit 17-A-033-S2
40 CFR 60 Subpart Db
567 IAC 23.1(2)"ccc"

[(2)] Per 40 CFR §60.44b, the NOx emission limits (expressed as NO_2) are:

- Low heat release rate = 43 ng/J (0.10 lb/MMBtu)
- High heat release rate = 86 ng/J (0.20 lb/MMBtu)

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 20.0 lb.hr
Authority for Requirement: DNR Construction Permit 17-A-033-S2

NSPS Applicability

EU ID	Subpart	Title	Type	State Reference (567 IAC)	Federal Reference (40 CFR)
P180	A	General Provisions	NA	23.1(2)	§60.1 – §60.19
	Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	Natural gas combustion	23.1(2)"ccc"	§60.40b – §60.49b

Authority for Requirement: DNR Construction Permit 17-A-033-S2

Operational Limits & Reporting/Record keeping Requirements

The owner/operator of this equipment shall comply with the operational limits and requirements listed below. Records shall be kept on site for at least five years and shall be available for inspection by the Department.

Equipment Operation and Fuel Usage Requirements

A. The Boiler (EU P180) shall be limited to firing on natural gas only.
B. The owner or operator shall operate Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180 simultaneously *only* during periods of startup and shutdown, Regenerative Thermal Oxidizer (CE170) malfunction, and required testing/tuning certification of the boilers. The simultaneous operation of the boilers is limited to a total heat input capacity of no more than 0.283 MMcf (natural gas) per hour for both boilers combined.
    i. The owner or operator shall maintain the following records for each time that Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180 are operated simultaneously:
        1) Calendar date;
        2) The number of hours of operation; and,
        3) Total amount of natural gas, in million cubic feet, used by Backup Natural Gas Boiler EU P10 and Natural Gas Boiler EU P180, combined.

New Source Performance Standards Requirements

C. Per 40 CFR §60.49b(d), the owner or operator shall record and maintain records of the amounts of each fuel combusted in the boiler during each calendar 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. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month. 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/operator shall comply with all reporting, notification, and recordkeeping requirements as specified 40 CFR Part 60 Subpart Db- *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, specifically §60.49b.

E. The owner or operator shall maintain records of the following information for each steam generating unit operating day for the boiler per 40 CFR §60.49b:
   a. Calendar date.
   b. The average hourly nitrogen oxides emission rates (expressed as NO2) (ng/J or lb/million Btu heat input) measured or predicted.
   c. The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted 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 nitrogen oxides emissions standards under §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
   e. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
   f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
   g. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
   h. Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
   i. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
   j. Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

F. The owner or operator shall submit excess emission reports for any excess emissions that occurred during the reporting period per 40 CFR §60.49b for the boiler.

G. Per 40 CFR§60.49b(r)(1), the owner or operator shall obtain and maintain at the affected facility fuel receipts from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in §60.41b and the applicable sulfur limit.

H. The owner/operator shall comply with all reporting, notification, and recordkeeping requirements as specified 40 CFR Part 60 Subpart A-*General Provisions* §60.1 through §60.19.

Authority for Requirement: DNR Construction Permit 17-A-033-S2
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75
Stack Opening, (inches, dia.): 72
Exhaust Flow Rate (scfm): 50,000
Exhaust Temperature (°F): 220
Discharge Style: Vertical unobstructed
Authority for Requirement: DNR Construction Permit 17-A-033-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.

Continuous Emissions Monitoring:

Pollutant – NO_x
Monitoring Equipment Number: ME01
Operational Specifications: 40 CFR Part 60
Reporting & Record keeping: 40 CFR Part 75
Authority for Requirement: DNR Construction Permit 17-A-033-S2
567 IAC 25.2
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

In accordance with 40 CFR §60.48b(b), the facility (plant number 99-05-003) shall install, calibrate, maintain, and operate a CEMS on S180, and record the output of the system, for measuring nitrogen oxides (NOx) and either oxygen (O_2) or carbon dioxide (CO_2) emissions discharged to the atmosphere. The system shall be designed to meet the 40 CFR 60, Appendix B, Performance Specification 2 (PS2) and Performance Specification 6 (PS6) requirements. The specifications of 40 CFR Appendix F (Quality Assurance/Quality Control) shall apply. Appendix F requirements shall be supplemented with a quarterly notice to the Department with

the dates of the quarterly cylinder gas audits and annual relative accuracy test audit. The relative accuracy test audits shall be coordinated with the Department.

The 1-hour average NOx emission rates measured by the NOx CEM required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emissions rates under 40 CFR 60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(h)(2).

Per 40 CFR 60.49b(f), when NOx emissions are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, 40 CFR Part 60 Appendix A Method 7, 40 CFR Part 60 Appendix A Method 7A, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days.

In accordance with 40 CFR Part 60 Subpart Db, the owner or operator shall install, calibrate, maintain, and operate a CEMS for measuring either the oxygen content or the carbon dioxide content of the flue gas discharged from the emission point to the atmosphere.

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

Authority for Requirement: DNR Construction Permit 17-A-033-S2
567 IAC 23.1(2)"ccc"
40 CFR 60 Subpart Db

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. Exceedences of applicable emission rates are prohibited. "Held" in this context refers to both those allowances assigned to the owners and operators by USEPA, and those allowances supplementally acquired by the owners and operators. The use of any allowance prior to the year for which it was allocated is prohibited. Contravention of any other provision of the permit is prohibited. *567 IAC 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*

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

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*

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 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department's stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department's request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks (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 and On or Before October 4, 2023
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 VV – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-VV

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

G. 40 CFR Part 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE)
https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ

V. Appendix B – Executive Order (EO10) Rules 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

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
22.130	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

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

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
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
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

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
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

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

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
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

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
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