# Iowa Department of Natural Resources Title V Operating Permit

# Name of Permitted Facility: Elite Octane, LLC Facility Location: 60502 Glacier Road Atlantic, IA 50022 Air Quality Operating Permit Number: 20-TV-004 Expiration Date: September 10, 2025 Permit Renewal Application Deadline: March 10, 2025

EIQ Number: 92-6985 Facility File Number: 15-01-042

<u>Responsible Official</u> Name: Mike Messing Title: Plant Manager Mailing Address: 60502 Glacier Road, Atlantic, IA 50022 Phone #: 712/254-9824

<u>Permit Contact Person for the Facility</u> Name: Amanda Breheny Title: Environmental Manager Mailing Address: 60502 Glacier Road, Atlantic, IA 50022 Phone #: 712/254-9808

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

### For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

# **Table of Contents**

I.	Facility Description and Equipment List4
II.	Plant - Wide Conditions7
III.	Emission Point Specific Conditions10
IV. G	Emission Point Specific Conditions       10         General Conditions       69         G1. Duty to Comply       62. Permit Expiration         G3. Certification Requirement for Title V Related Documents       64.         G4. Annual Compliance Certification       65.         G5. Semi-Annual Monitoring Report       66.         G6. Annual Fee       67.         G7. Inspection of Premises, Records, Equipment, Methods and Discharges         G8. Duty to Provide Information       69         G9. General Maintenance and Repair Duties         G10. Recordkeeping Requirements for Compliance Monitoring         G11. Evidence used in establishing that a violation has or is occurring.         G12. Prevention of Accidental Release: Risk Management Plan Notification and Compliance Certification         G13. Hazardous Release         G14. Excess Emissions and Excess Emissions Reporting Requirements         G15. Permit Deviation Reporting Requirements         G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations         7. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification         G18. Duty to Modify a Title V Permit
	<ul> <li>G19. Duty to Obtain Construction Permits</li> <li>G20. Asbestos</li> <li>G21. Open Burning</li> <li>G22. Acid Rain (Title IV) Emissions Allowances</li> <li>G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements</li> <li>G24. Permit Reopenings</li> <li>G25. Permit Shield</li> <li>G26. Severability</li> <li>G27. Property Rights</li> <li>G28. Transferability</li> <li>G29. Disclaimer</li> <li>G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification</li> <li>G31. Prevention of Air Pollution Emergency Episodes</li> <li>G32. Contacts List</li> </ul>
<b>V.</b> .	Appendix A:         Weblinks to Standards

RLA, CJK

# Abbreviations

acfmactual cubic feet per minute
CFRCode of Federal Regulation
CE control equipment
CEMcontinuous emission monitor
°Fdegrees Fahrenheit
EIQemissions inventory questionnaire
EPemission point
EUemission unit
gr./dscfgrains per dry standard cubic foot
IACIowa Administrative Code
DNRIowa Department of Natural Resources
MVAC motor vehicle air conditioner
NAICSNorth American Industry Classification System
NSPSnew source performance standard
ppmvparts per million by volume
lb./hrpounds per hour
lb./MMBtupounds per million British thermal units
SCCSource Classification Codes
scfmstandard cubic feet per minute
SIC Standard Industrial Classification
TPYtons per year
USEPAUnited States Environmental Protection Agency
Pollutants
PMparticulate matter
PM <sub>10</sub> particulate matter ten microns or less in diameter
SO <sub>2</sub> sulfur dioxide

TIOO	1 1
VOC	volatile organic compound
100	volutile organie compound

CO...... carbon monoxide

HAP ...... hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Elite Octane, LLC Permit Number: 20-TV-004

Facility Description: Industrial Organic Chemicals, Not Elsewhere Classified (SIC 2869)

# **Equipment List**

Emission	Emission	Emission Unit Description	DNR		
Point	Unit		Construction		
Number	Number		Permit Number		
	E26	Mixer			
	E27	Slurry Tank #1			
	E28	Slurry Tank #2			
	E29	Liquefaction Tank #1			
	E30	Liquefaction Tank #2			
	E41	Beer Column			
	E42	Rectifier Column			
	E43	Side Stripper			
S10	E44	190 Proof Condenser	15-A-087-S4		
	E46-E54	Molecular Sieve #1-9			
	E55	200 Proof Condenser			
	E62-E67	Centrifuge #1-6			
	E69-E76	Evaporator #1-8			
	E83-E86	DDGS Dryer A-D			
	E87	DDGS Cooling Drum			
	E100	Distillation Process Vents			
	E103	Centrate Tank			
	E1-E2	Truck Dump Pits #1-2			
	E4	Rail Dump Pit			
S20	E5-E6 Grain Unloading Conveyors #1-2		15-A-088-S3		
	E8-E9	Grain Elevators #1-2			
	E11-E12	Emptying Conveyors #1-2			
S25	E16	Grain Storage Bin #1	17-A-070-S2		
S26	E17	Grain Storage Bin #2	17-A-069-S2		
	E18	Grain Day Bin #1			
S27	E19	Clean Corn Day Bin	17-A-068-S1		
527	E20	Scalper #1	1/-A-008-51		
	E21	Scalper #2			
S30	E22-E25	Hammer Mill #1-4	15-A-089-S2		
	E32-E39	Fermenters #1-8			
S40	E40	Beer Well	15-A-090-S3		
540	E101	Fermenter #9			
	E102	Degasification Tank			
S50	E95	Truck Ethanol Fuel Loading Rack	15-A-091-S3		

Emission Emission		Emission Unit Description	DNR
Point	Unit		Construction
Number	Number		Permit Number
	E96	Rail Car Ethanol Fuel Loading Rack #1	
	E97	Rail Car Ethanol Fuel Loading Rack #2	
S71	E98	Natural Gas Boiler #1	15-A-093-S2
S72	E99	Natural Gas Boiler #2	15-A-094-S2
	E88	DDGS Conveyor	
	E89	DDGS Elevator	
S90	E92	DDGS Loadout Conveyor	15-A-095-S1
	E93	DDGS Loadout #1	
	E94	DDGS Loadout #2	
S100	E87	DDGS Cooling Drum	17-A-071-S1
S110	FWP	Fire Pump Engine	NA
FUG3	FUG3	Fugitive Emissions from Equipment Leaks	15-A-105-S3
FUG4	FUG4	Fugitive Dust Plant Haul Roads (Plant-wide)	15-A-106-S1
F81	F81	Cooling Tower (4 cell)	15-A-096-S1
T1	E45	190 Proof Ethanol Storage tank	15-A-098-S2
T2	E56	200 Proof Ethanol Storage tank	15-A-099-S2
Т3	E57	Ethanol Fuel Product Storage Tank #1	15-A-100-S2
T4	E58	Ethanol Fuel Product Storage Tank #2	15-A-101-S2
T5	E59	Ethanol Fuel Product Storage Tank #3	15-A-102-S2
T6	E60	Denaturant Storage Tank	15-A-103-S2
Τ7	E61	Corrosion Inhibitor Storage Tank	15-A-104-S1

# Insignificant Activities Equipment List

Insignificant Emission	Insignificant Emission Unit Description
Unit Number	
E105	Thin Stillage Tank
E106	Syrup Tank Vent
E108	Cook Water Tank Vent
E109	Whole Stillage Tank
E110	Corn Oil Loadout
E111	Sulfuric Acid Tank
FUG7	Insignificant Process Vents
E112	Wet Cake Pad

# **II. Plant-Wide Conditions**

Facility Name: Elite Octane, LLC Permit Number: 20-TV-004

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

### **Permit Duration**

The term of this permit is: 5 years Commencing on: September 11, 2020 Ending on: September 10, 2025

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

#### **Emission Limits**

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

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

<u>Sulfur Dioxide (SO<sub>2</sub>):</u> 500 parts per million by volume Authority for Requirement: 567 IAC 23.3(3)"e"

### Particulate Matter:

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

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

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

<u>Fugitive Dust:</u> 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

RLA, CJK

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"

## NSPS and NESHAP Applicability

### 40 CFR Part 60 Subpart A

This facility is an affected source and these General Provisions apply to the facility. The affected emission points are S20, S27, S71, S72, T1-T6 and FUG3. See Appendix for a link to the Standard. Authority for Requirements: 40 CFR Part 60 Subpart A 567 IAC 23.1(2)

### 40 CFR Part 60 Subpart Db

This facility is subject to Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units. The affected emission points are S71 and S72. See Appendix for a link to the Standard. Authority for Requirements: 40 CFR Part 60 Subpart Db 567 IAC 23.1(2)"ccc"

### 40 CFR Part 60 Subpart DD

This facility is subject to Standards of Performance for Grain Elevators. The affect emission points are S20 and S27. See Appendix for a link to the Standard. Authority for Requirements: 40 CFR Part 60 Subpart DD 567 IAC 23.1(2)"000"

### 40 CFR Part 60 Subpart Kb

This facility is subject to Standards of Performance for Volatile Organic Liquid storage vessels (including petroleum liquids). The affected emission points are T1-T6. See Appendix for a link to the Standard. Authority for Requirements: 40 CFR Part 60 Subpart Kb 567 IAC 23.1(2)"ddd"

### 40 CFR Part 60 Subpart VVa

This facility is subject to Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. The affect emission point is FUG3. See Appendix for a link to the Standard.

Authority for Requirements: 40 CFR Part 60 Subpart VVa

567 IAC 23.1(4)"nn"

## 40 CFR Part 60 Subpart IIII

This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The affected emission point is S110. See Appendix for a link to the Standard. Authority for Requirements: 40 CFR Part 60 Subpart IIII 567 IAC 23.1(4)"yyy"

### 40 CFR Part 63 Subpart A

This facility is subject to the National Emissions Standards for Hazardous Air Pollutants – General Provisions. The affected emission point is S110. Authority for Requirements: 40 CFR 63 Subpart A 567 IAC 23.1(4)"a"

## 40 CFR Part 63 Subpart ZZZZ

This facility is subject to the National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The affected emission point is S110.

See Appendix for a link to the Standard.

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

# **III. Emission Point-Specific Conditions**

Facility Name: Elite Octane, LLC Permit Number: 20-TV-004

# **Emission Point ID Number: S10 - Fermentation, Distillation and DDGS** Dryers

Associated Equipment:

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
Mixer	E26	19,800 gallons			
Slurry Tanks #1-2	E27 and E28	25,000 gallons (each)		Slurry/Mash	
Liquefaction Tank #1	E29	128,400 gallons		Mash	
Liquefaction Tank #2	E30	128,400 gallons		Mash	
Beer Column	E41	2,000 gallons of beer per minute		Beer	
Rectifier Column	E42	2,000 gallons of beer per minute		Beer	
Side Stripper	E43	2,000 gallons of beer per minute	Regenerative	Beer	
190 Proof Condenser E44 2,00		2,000 gallons of beer per minute	Thermal Oxidizer, 12 MMBtu/hr	Beer	15-A-087-S4
Molecular Sieves (9 total)	E46 - 2,000 gallons of beer E54 per minute		(C10) and / or	Beer	
200 Proof Condenser	E55	2,000 gallons of beer per minute	Regenerative Thermal Oxidizer,	Beer	
Centrifuges #1-6	E62 - E67	44.4 tons of whole stillage per hour per centrifuge	12 MMBtu/hr (C11)	Whole stillage	
Evaporators #1-8	E69 - E76	44.4 tons of whole stillage per hour per evaporator	()	Whole stillage	
DDGS Dryers A - D	E83 - E86	15 tons DDGS/hour, 55 MMBtu/hour		DDGS	
DDGS Cooling Drum / Baghouse C70	E87	55.65 tons/hour		DDGS	
Distillation Process Vents	E100	18,000 gallons of ethanol per hour		Ethanol	
Centrate Tank	E103	3,000 gallons		Centrate	

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S10	40% <sup>(1)</sup>	13.91 lb/hr	13.91 lb/hr	13.91 lb/hr; 0.1 gr/dscf	DNR Construction Permit 15-A-087-S3, 567 IAC 23.4(7), 567 IAC 23.3(2)"d"

<sup>(1)</sup>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: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 25.19 lb/hr, 500 ppmv Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 15-A-087-S4

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 19.50 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 8.35 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 27.32 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Acetaldehyde Emission Limit(s): 0.50 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Acrolein Emission Limit(s): 0.75 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Formaldehyde Emission Limit(s): 0.27 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

Pollutant: Methanol Emission Limit(s): 0.34 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4 Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 2.3010 lb/hr Authority for Requirement: DNR Construction Permit 15-A-087-S4

### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The owner or operator shall operate RTO C10 and/or RTO C11 at all times any of the equipment described in Associated Equipment is in operation.
- B. DDGS Dryers A through D and RTOs C10 and C11 shall combust only natural gas and/or process off-gases.
- C. Each RTO operating temperature, measured as a 3-hour rolling average, shall be maintained at or above the average temperature recorded during the most recent stack test that demonstrated compliance with all applicable emission limitations. This requirement shall not apply on the days that the equipment described in Table 1 of this permit and the RTOs are not in operation.
  - i. The owner or operator shall retain the most recent stack test report for EP-S10 that demonstrated compliance with all applicable emission limitations.
  - ii. The owner or operator shall document the average temperature for each RTO recorded during the most recent stack test that demonstrated compliance with all applicable emission limitations.
  - iii. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the temperature of each RTO. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications.
  - iv. The owner or operator shall continuously collect and record each RTO operating temperature (in degrees Fahrenheit) at a minimum of once every 15 minutes and calculate and record the 3-hour rolling average temperature for each RTO. The 3-hour rolling average temperature for each RTO shall be calculated using all data points collected during the averaging period.
  - v. If any of the RTO operating temperature 3-hour rolling averages falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the RTO 3hour rolling average operating temperature is back at or above the minimum required value.
- D. The owner or operator shall maintain records of the frequency and amount of time that each RTO malfunctions and shall estimate and record the emissions emitted during said malfunctions. All excess emission reporting shall be conducted in accordance with General Condition G14 of this permit.
- E. DDGS production shall not exceed 487,500 tons per rolling 12-month period.
  - i. The owner or operator shall record the total amount, in tons, of DDGS produced on a monthly basis.
  - ii. The owner or operator shall calculate and record the total amount, in tons, of DDGS produced on a rolling 12-month basis.

- F. The owner or operator shall inspect and maintain RTOs C10 and C11 according to the manufacturer's specifications. The owner or operator shall keep a log of all inspection and maintenance activities performed on the control equipment. At a minimum, this log shall include:
  - i. The date that any inspection and/or maintenance was performed on the control equipment;
  - ii. Any issues identified during any inspection and maintenance activities and the date each issue was resolved;
  - iii. Any actions taken to correct any RTO operating temperature malfunctions; and
  - iv. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 15-A-087-S4

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 125 Stack Opening, (inches, dia.): 121 Exhaust Flow Rate (scfm): 124,400 Exhaust Temperature (°F): 325 Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-087-S4

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

## **Monitoring Requirements**

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

<b>Compliance</b>	Demonstration	Table

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
NO <sub>x</sub> <sup>1</sup>	Stack Testing <sup>1</sup>	Once Every 3 Years	1 hour	40 CFR 60, Appendix A, Method 7E
VOC <sup>2</sup>	Stack Testing <sup>2</sup>	Once Every 3 Years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP <sup>1,3</sup>	Stack Testing <sup>3</sup>	Once Every 3 Years	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>1</sup> NO<sub>x</sub> periodic testing to demonstrated compliance with the applicable emission limits of this permit shall be completed once every three years, while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. Should any stack tests demonstrate emission rates that are greater than 90% of the applicable emission limits; the owner or operator shall conduct stack testing on an annual basis. Annual testing shall continue until 3 consecutive tests are less than 90% of the applicable emission limits, after which testing once every three years shall resume. The  $NO_x$  initial stack test was conducted on October 4, 2018; therefore, the next test shall be completed by October 4, 2021.

- <sup>2</sup> VOC periodic testing to demonstrated compliance with the applicable emission limits of this permit shall be completed once every three years, while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. VOC periodic testing shall be completed during the months of June, July, or August. The owner or operator shall conduct stack testing on an annual basis, should any stack tests demonstrate emission rates that are greater than 90% of the applicable emission limits. Annual testing shall continue until 3 consecutive tests are less than 90% of the applicable emission limits, after which, testing once every three years shall resume. The owner or operator shall complete the next VOC test by October 4, 2021.
- <sup>3</sup> HAP periodic testing to demonstrated compliance with the applicable emission limits of this permit shall be completed once every 3 years. HAP periodic testing shall be completed during the months of June, July, or August, while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. Acetaldehyde, acrolein, formaldehyde, and methanol shall be tested for specifically. The specified HAP that tests below the detection limit shall be assumed to be emitting at a rate equal to the detection limit. The owner or operator shall complete the next HAP test by June 4, 2022.

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 15-A-087-S4

Agency Approved Operation & Maintenance Plan Required?	Yes 🖂 No 🗌
Monitoring requirements for baghouse C70 are defined in Construction	n Permit 17-A-071-S1.

Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: S20 – Grain Receiving and Handling**

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
Truck Dump Pits #1-2	E1, E2	30,000 bushels/hour, each dump pit			
Rail Dump Pit	E4	30,000 bushels/hour			
Grain Unloading Conveyors #1-2	E5, E6	30,000 bushels/hour, each conveyor	Baghouse (C20)	Grain	15-A-088-S3
Grain Elevators #1- #2	E8, E9	30,000 bushels/hour, each grain elevator			
Emptying Conveyors #1-2	E11, E12	60,000 bushels/hour, each conveyor			

Associated Equipment:

# **Applicable Requirements**

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

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

### NSPS Emission Limits for E1, E2, E4, E5, E6, E8, E9, E11 and E12:

Opacity	Particulate Matter (PM) - Federal	Authority for Requirement
0 % (1)	0.01 gr/dscf	40 CFR 60.302(b)(2), 40 CFR 60.302(b)(1), 567 IAC 23.1(2)"000"

<sup>(1)</sup> Per 40 CFR §60.11 of Subpart A, the limit is based on thirty 6-minute averages and applies at all times, except during periods of startup, shutdown, and malfunction.

### **Emission Limits for Emission Point S20:**

PM-2.	5	PM-10	Particulate Matter (PM) - State	Authority for Requirement
1.89 lb/	ĥr	1.89 lb/hr	1.89 lb/hr; 0.1 gr/dscf	DNR Construction Permit 15-A-088-S3, 567 IAC 23.4(7)

# **NSPS Applicability**

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
E1, E2,	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E4, E5, E6, E8, E9, E11, E12	DD	Standards of Performance for Grain Elevators	NA	23.1(2)"000"	§60.300 – §60.304

Authority for Requirement: DNR Construction Permit 15-A-088-S3

40 CFR 60 Subpart A 567 IAC 23.1(2) 40 CFR 60 Subpart DD 567 IAC 23.1(2)"000"

## **Operating Requirements with Associated Monitoring and Recordkeeping**

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

Equipment Operation and Throughput Limit Requirements

- A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subparts A and DD, including those not specifically mentioned in this permit.
- B. The owner or operator shall operate the baghouse (C20) at all times that any of the emission units described in this permit is in operation.
- C. The owner or operator shall program the system to automatically lock out the aeration fan during the loading of the grain day bin (E18) and shall continue to operate the system under negative pressure (vent emissions through the baghouse, C20) for a minimum of 15 minutes after the loading of the grain day bin (E18) has been completed.
- D. There shall be no visible emissions observed from the entrance or exit of the grain unloading building.
  - i. The owner or operator shall conduct visible emissions observations on Emission Point S20 once per calendar day. This requirement shall not apply on the days that none of the emission units described in this permit is in operation.
    - 1. The owner or operator shall record the date and time of the observation and the presence or absence of visible emissions.
    - 2. If visible emissions from EP-S20 are observed, the owner or operator shall investigate the emission unit or control equipment and make corrections to the associated operations or equipment.
    - 3. The owner or operator shall maintain a record of all corrective actions taken.
- E. Grain receiving shall be conducted within an enclosure. All grain unloading shall use choke flow and enclosed dump pits to minimize fugitive dust emissions.
- F. The owner or operator shall conduct opacity observations at the grain unloading building during periods of unloading from straight trucks using EPA Method 9 or another method approved by the Department.

- i. The owner or operator shall conduct opacity observations at least four (4) times during the first twelve (12) months of issuance of this permit to ensure opacity does not exceed 0 percent as required in 40 CFR §60.302(b)(2) of Subpart DD. If less than four straight trucks are unloaded during the initial 12-month period, the owner or operator shall maintain documentation.
- ii. Once four total observations demonstrate compliance with the opacity limit, the owner or operator may reduce subsequent testing to twice annually.

*Note*: Straight trucks/trailers are those that **do not** discharge through the bottom of the trailer (i.e., through a bottom hopper).

- G. The maximum amount of grain received and/or processed at Plant No. 15-01-042 shall not exceed 66,000,000 bushels per rolling 12-month period.
  - i. The owner or operator shall record the total amount, in bushels, of grain received at Plant No. 15-01-042 on a monthly basis.
  - ii. The owner or operator shall calculate and record the total amount, in bushels, of grain received at Plant No. 15-01-042 on a rolling 12-month basis.

# Control Equipment Monitoring Requirements

- H. The owner or operator shall inspect and maintain the baghouse (C20) according to the manufacturer's specifications with inspections occurring at a minimum of once per calendar year.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (C20). At a minimum, this log shall include:
    - 1. The date that any inspection and/or maintenance was performed on the baghouse;
    - 2. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
    - 3.Identification of the staff member performing the maintenance activities.

Authority for Requirement: DNR Construction Permit 15-A-088-S3

## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 160 Stack Opening, (inches, dia.): 50 Exhaust Flow Rate (scfm): 26,000 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-088-S3

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

### **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number:** S25 and S26 – Grain Storage Bins #1-2

Emission Point	Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
S25	Grain Storage Bin #1	E16	2,000,000 bushels	Bin Vent Filter (C25)	Grain	17-A-070-S2
S26	Grain Storage Bin #2	E17	2,000,000 bushels	Bin Vent Filter (C26)	Giaili	17-A-069-S2

Associated Equipment:

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S25, S26	40% <sup>(1)</sup>	0.04 lb/hr	0.14 lb/hr	0.1 gr/dscf	DNR Construction Permit 17-A-070-S2, 17-A-069-S2, 567 IAC 23.4(7)"c", 567 IAC 23.3(2)"d"

<sup>(1)</sup> 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).

## **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the bin vent filters (C25 and C26) according to the manufacturer's specifications with inspections occurring at a minimum of once per calendar year.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the bin vent filters (C25 and C26). At a minimum, this log shall include:
    - 1. The date that any inspection and/or maintenance was performed on the bin vent filters (C25 and C26);
    - 2. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
    - 3.Identification of the staff member performing the maintenance activities.

Authority for Requirement: DNR Construction Permit 17-A-070-S2, 17-A-069-S2

## **Emission Point Characteristics**

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 168.5 Stack Opening, (inches, dia.): 12 Exhaust Flow Rate (scfm): 1,245 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 17-A-070-S2, 17-A-069-S2

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

### **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

# Emission Point ID Number: S27 – Grain Day Bin #1 and Scalper #1

Associated Equipment.							
Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit		
Grain Day Bin #1	E18	224 tons/hour; 4,200 tons/day	Bin Vent Filter (C27)	Grain	17-A-068-S1		
Scalper #1	E20	210 tons/hour					

Associated Equipment:

# **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.

Emission Point	Opacity	PM <sub>2.5</sub>	<b>PM</b> <sub>10</sub>	Particulate Matter	Authority for Requirement
S27	0%(1)	0.03 lb/hr	0.06 lb/hr	0.1 gr/dscf; 0.01 gr/dscf	DNR Construction Permit 17-A-068-S1, 40 CFR 60.302(b)(1), 40 CFR 60.302(b)(2), 567 IAC 23.1(2)"000", 567 IAC 23.4(7)

<sup>(1)</sup> Per 40 CFR §60.11 of Subpart A, the limit is based on thirty 6-minute averages and applies at all times, except during periods of startup, shutdown, and malfunction.

### **NSPS Applicability**

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
E18	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E18 E20	DD	Standards of Performance for Grain Elevators	NA	23.1(2)"000"	§60.300 — §60.304

Authority for Requirement: DNR Construction Permit 17-A-068-S1

40 CFR 60 Subpart A 567 IAC 23.1(2) 40 CFR 60 Subpart DD 567 IAC 23.1(2)"000"

### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The owner or operator shall keep a log of all maintenance and inspection activities performed on the bin vent filters (C27) according to the manufacturer's specifications with inspections occurring at a minimum of once per calendar year.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities

performed on the bin vent filters (C27). At a minimum, this log shall include:

- 1. The date that any inspection and/or maintenance was performed on the bin vent filters (C27);
- 2. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
- 3.Identification of the staff member performing the maintenance activities. Authority for Requirement: DNR Construction Permit 17-A-068-S1

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 77 Stack Opening, (inches, dia.): 6 Exhaust Flow Rate (scfm): 500 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 17-A-068-S1

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

#### **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

Good air pollution control practice is achieved by adoption of quality control standards in the operation and maintenance procedures for air pollution control that are comparable to industry quality control standards for the production processes associated with this emission point. Authority for Requirement: 567 IAC 22.108(3)

# Emission Point ID Number: S30 – Hammer Mill #1-4

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
Hammer Mill #1	E22				
Hammer Mill #2	E23	6.000 bushels/hour each	Dechause (C20)	Grain	15-A-089-S2
Hammer Mill #3	E24	0,000 busilets/hour each	Baghouse (C30)	Gram	15-A-089-52
Hammer Mill #4	E25				

Associated Equipment:

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S30	40% <sup>(1)</sup>	1.37 lb/hr	1.37 lb/hr	1.37 lb/hr, 0.1 gr/dscf	DNR Construction Permit 15-A-089-S2, 567 IAC 23.4(7), 567 IAC 23.3(2)"d"

<sup>(1)</sup>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).

### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

### **Equipment Operation**

- A. The owner or operator shall operate the baghouse (C30) at all times that any of the hammer mills described in this permit is in operation.
- B. The pressure drop across the baghouse (C30) shall be maintained between 0.5 and 10 inches water column during normal operation conditions, i.e., excluding periods of startup, shutdown, and malfunction.
  - 1. The owner or operator shall collect and record the pressure drop, in inches of water column, across the baghouse (C30) on a daily basis while the baghouse is in operation.
  - 2. If the pressure drop across the baghouse falls outside the required range, the owner or operator shall record the date and actions taken to correct the situation and shall record when the pressure drop is back within the required range.

### Control Equipment Monitoring Requirements

C. The owner or operator shall inspect and maintain the baghouse (C30) according to the manufacturer's specifications with inspections occurring at a minimum of once per

calendar year.

- i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (C30). At a minimum, this log shall include:
  - 1. The date that any inspection and/or maintenance was performed on the baghouse;
  - 2. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
  - 3.Identification of the staff member performing the maintenance activities.

Authority for Requirement: DNR Construction Permit 15-A-089-S2

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 160 Stack Opening, (inches, dia.): 38 Exhaust Flow Rate (scfm): 12,000 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-089-S2

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

### **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?	
--	--

Operating Requirements contain monitoring equivalent to Agency O & M plan for baghouse C30.

Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

Yes 🖂 No 🗌

# **Emission Point ID Number: S40 – Fermentation Scrubber**

Associated Equipment.							
Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit		
Fermenters #1-8	E32-E39	807,000 gallons					
Beer Well	E40	1.08 million gallons	Packed Bed Scrubber				
Fermenter #9	E101	807,000 gallons	(C40)	Beer	15-A-090-S3		
Degasification Tank	E102	4,900 gallons					

Associated Equipment:

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S40	40% <sup>(1)</sup>	0.10 lb/hr	0.10 lb/hr	0.20 lb/hr, 0.1 gr/dscf	DNR Construction Permit 15-A-090-S3, 567 IAC 23.4(7), 567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: Volatile Organic Compounds (VOC) Emission Limit(s): 15.50 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3

Pollutant: Acetaldehyde Emission Limit(s): 1.10 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3

Pollutant: Acrolein Emission Limit(s): 0.26 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3

Pollutant: Formaldehyde Emission Limit(s): 0.11 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3

Pollutant: Methanol Emission Limit(s): 0.30 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3 Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 1.77 lb/hr Authority for Requirement: DNR Construction Permit 15-A-090-S3

# **Operating Requirements with Associated Monitoring and Recordkeeping**

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

Equipment Operation Requirements

A. The owner or operator shall operate Packed Bed Scrubber C40 at all times any of the emission units described in this permit is in operation.

Control Equipment Requirements

- B. The owner or operator shall maintain a 3-hour rolling average differential pressure drop across Packed Bed Scrubber C40 between 2 and 20 inches of water column (as specified by the manufacturer). This requirement shall not apply when the equipment the scrubber controls and the scrubber are not in operation.
  - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the pressure drop (in inches of water column) across Packed Bed Scrubber C40. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications.
  - ii. The owner or operator shall collect and record the pressure drop (in inches of water column) across Packed Bed Scrubber C40 at a minimum of once every 15 minutes and calculate and record the 3-hour rolling average differential pressure drop for the scrubber. The 3-hour rolling average differential pressure drop across Packed Bed Scrubber C40 shall be calculated using all data points collected during the averaging period.
  - iii. If any of the differential pressure drop (in inches of water column) 3-hour rolling averages across Packed Bed Scrubber C40 falls outside the required range, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average differential pressure drop is back within the required range.
- C. The owner or operator shall maintain a 3-hour rolling average total scrubber liquid (water) flow rate (in gallons per minute) into Packed Bed Scrubber C40 at or above the average rate observed during the most recent stack test that demonstrated compliance with the emission limits in Condition 1 of this permit. This requirement shall not apply when the equipment the scrubber controls and the scrubber are not in operation.
  - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the total water flow rate (in gallons per minute) into Packed Bed Scrubber C40. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications.
  - ii. The owner or operator shall collect and record the total water flow rate (in gallons per minute) into Packed Bed Scrubber C40 at a minimum of once every 15 minutes and calculate and record the 3-hour rolling average total water flow rate into the scrubber. The 3-hour rolling average total water flow rate into Packed Bed

Scrubber C40 shall be calculated using all data points collected during the averaging period.

- iii. If any of the total water flow rate (in gallons per minute) 3-hour rolling averages into Packed Bed Scrubber C40 falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average total water flow rate is back at or above the minimum required value.
- iv. Use of a lower total water flow rate requires the owner or operator to first obtain a variance to test the lower total water flow rate. The owner or operator shall submit the test results to the Department for review and approval. Once the test results are approved, the owner or operator shall be allowed to use the lower total water flow rate.
- D. The owner or operator shall maintain a 3-hour rolling average additive feed rate (in milliliters per minute) into Packed Bed Scrubber C40 at or above the average rate observed during the most recent stack test that demonstrated compliance with the emission limits described in this permit. This requirement shall not apply when the equipment the scrubber controls and the scrubber are not in operation.
  - i. The owner or operator shall install, operate, and maintain equipment necessary to continuously monitor the additive feed rate (in milliliters per minute) into Packed Bed Scrubber C40. This equipment shall be installed, operated, and maintained in accordance with the manufacturer's specifications.
  - ii. The owner or operator shall collect and record the additive feed rate (in milliliters per minute) into Packed Bed Scrubber C40 at a minimum of once every 15 minutes and calculate and record the 3-hour rolling average additive feed rated into the scrubber. The 3-hour rolling average additive feed rated into Packed Bed Scrubber C40 shall be calculated using all data points collected during the averaging period.
  - iii. If any of the additive feed rate (in milliliters per minute) 3-hour rolling averages into Packed Bed Scrubber C40 falls below the minimum required value, the owner or operator shall record the time, date, and actions taken to correct the situation and shall record when the average additive feed rate is back at or above the minimum required value.
  - iv. Use of a different additive and/or use of a lower additive feed rate requires the owner or operator to first obtain a variance to test the new additive and/or the lower additive feed rate. The owner or operator shall submit the test results to the Department for review and approval. Once the test results are approved, the owner or operator shall be allowed to use the new additive and/or the lower additive feed rate.
- E. The owner or operator shall maintain on-site a copy of the report for the most recent stack conducted on Emission Point S40 that demonstrated compliance with the emission limits described in this permit. At a minimum, this report shall include:
  - i. The emission rates (in pounds per hour) observed during the testing;
  - ii. The average differential pressure drop (in inches of water column) across Packed Bed Scrubber C40 observed during the testing;
  - iii. The average total water flow rate (in gallons per minute) into Packed Bed Scrubber C40 during the testing;
  - iv. The type of additive used during the testing; and

- v. The average additive feed rate (in milliliters per minute) into Packed Bed Scrubber C40 during the testing.
- F. The owner or operator shall inspect and maintain Packed Bed Scrubber C40 according to the manufacturer's specifications.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on Packed Bed Scrubber C40. At a minimum, this log shall include the following:
    - 1. The date that any inspection and/or maintenance was performed on the scrubber;
    - 2. Any issues identified during inspection and maintenance activities and the date that each issue was resolved; and
    - 3. Identification of the staff member performing the maintenance or inspection.

Authority for Requirement: DNR Construction Permit 15-A-090-S3

## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 75 Stack Opening, (inches, dia.): 27 Exhaust Flow Rate (scfm): 18,600 Exhaust Temperature (°F): 79 Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-090-S3

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

## **Monitoring Requirements**

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

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
VOC <sup>1</sup>	Stack Testing <sup>1</sup>	Initial Semi-Annual <sup>1</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
HAP <sup>1, 2</sup>	Stack Testing <sup>1</sup>	Initial Semi-Annual <sup>1</sup>	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

### **Compliance Demonstration Table**

<sup>1</sup> VOC and HAP periodic testing to demonstrate compliance with the emission limits described in this permit shall be conducted semi-annually with a minimum of 90 days between tests. At least, one test shall be conducted during June, July, or August every year, while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. If the results of three consecutive June, July, or August tests are below 90% of the applicable emission limitations, the facility may *request* amendment of this permit to reduce testing to once per year.

<sup>2</sup> Acetaldehyde, acrolein, formaldehyde, and methanol shall be tested for specifically. The specified HAP that tests below the detection limit shall be assumed to be emitting at a rate equal to the detection limit.

Authority for Requirement: DNR Construction Permit 15-A-090-S3

# Agency Approved Operation & Maintenance Plan Required? Yes 🖂 No 🗌

Operating Requirements contain monitoring equivalent to Agency O & M plan for Packed Bed Scrubber (C40).

Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: S50 – Ethanol Fuel Product Load Out**

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
Truck Ethanol Fuel Loading Rack	E95	600 gal/min	API Dry Break Coupler (C50A); Enclosed Flare, 6.68 MMBtu/hr (C50B)		
Rail Car Ethanol Fuel Loading Rack #1	E96	1,200 gal/min	Foam Ring (C50C); Enclosed Flare, 6.93 MMBtu/hr (C50D)	Ethanol	15-A-091-S3
Rail Car Ethanol Fuel Loading Rack #2	E97	1,200 gal/min	Foam Ring (C50E); Enclosed Flare, 6.93 MMBtu/hr (C50D)		

Associated Equipment:

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S50	(1)	0.10 lb/hr	0.10 lb/hr	0.10 lb/hr, 0.1 gr/dscf	DNR Construction Permit 15-A-091-S3, 567 IAC 23.4(7)

<sup>(1)</sup> The flare (C50) shall operate with no visible emissions, except for periods not exceeding a total of 5 minutes during any 2 consecutive hours.

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv Authority for Requirement: DNR Construction Permit 15-A-091-S3

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 4.42 lb/hr Authority for Requirement: DNR Construction Permit 15-A-091-S3

Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 8.59 lb/hr Authority for Requirement: DNR Construction Permit 15-A-091-S3

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 7.36 lb/hr Authority for Requirement: DNR Construction Permit 15-A-091-S3 Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 0.75 lb/hr Authority for Requirement: DNR Construction Permit 15-A-091-S3

## **Operating Requirements with Associated Monitoring and Recordkeeping**

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

Equipment Operation and Throughput Limits Requirements

- A. The owner or operator shall use submerged fill pipes that are no more than 6 inches from the bottom of the cargo tank.
  - i. The owner or operator shall maintain submerged fill pipe documentation, including but not limited to, vendor specifications and date of installation.
- B. The total amount of ethanol fuel product loaded out at Plant No. 15-01-042 shall not exceed 175 million gallons per rolling 12-month period. Fuel ethanol product is defined as undenatured ethanol and denatured ethanol.
  - i. The owner or operator shall record the total amount, in gallons, of ethanol fuel product loaded out at this facility on a monthly basis.
  - ii. The owner or operator shall calculate and record the total amount, in gallons, of ethanol fuel product loaded at this facility on a rolling 12-month basis.
- C. Operation at the truck load out shall be conducted as follows:
  - i. Truck load outs may be switch-loaded, i.e., filled with ethanol fuel product when the previous tank load was gasoline.
  - ii. The maximum amount of ethanol fuel product loaded at the truck load out shall not exceed 25 million gallons per rolling 12-month period.
    - 1. The owner or operator shall record the total amount, in gallons, of ethanol fuel product loaded at the truck load out on a monthly basis.
    - 2. The owner or operator shall calculated and record the total amount, in gallons, of ethanol fuel product loaded at the truck load out on a rolling 12-month basis.
- D. Operation at the rail car load out shall be conducted as follows:
  - i. All rail load outs shall be to dedicated tank railcars, i.e., no switch-loading.

Control Equipment Requirements

- E. The flare shall be operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.
- F. 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.
- G. The owner or operator shall continuously verify the output of the flame detection system indicating the presence of a flame, while loading.
- H. The owner or operator shall operate the API Dry Break Coupler and each Foam Ring so as to ensure 100 percent capture of vapors during product loading at the truck and rail load outs.
  - i. The owner or operator shall perform manufacturer's recommended inspection activities on the API Dry Break Coupler connection and each Foam Ring

connection prior to each loading operation.

- 1.If a connection is found to be defective, the owner or operator shall not load the product until the connection is repaired to manufacturer's specifications.
- I. The owner or operator shall inspect and maintain the control equipment (C50A, C50B, C50C, C50D, and C50E) according to the manufacturer's specifications and instructions.
  - ii. The owner or operator shall keep a log of all maintenance and inspection activities performed on the control equipment (C50A, C50B, C50C, C50D, and C50E). At a minimum, this log shall include:
    - 1.The date that any inspection and/or maintenance was performed on the control equipment (C50A, C50B, C50C, C50D, and C50E);
    - 2. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
    - 3.Identification of the staff member performing the maintenance activities.

Authority for Requirement: DNR Construction Permit 15-A-091-S3

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 34,000
Exhaust Temperature (°F): 1,600
Discharge Style: vertical, unobstructed
Authority for Requirement: DNR Construction Permit 15-A-091-S3

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

### **Monitoring Requirements**

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

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency
VOC	Material throughput recordkeeping	12-month rolling
HAP	Material throughput recordkeeping	12-month rolling

Authority for Requirement: DNR Construction Permit 15-A-091-S3

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

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

Authority for Requirement: 567 IAC 22.108(3)

# Emission Point ID Number: S71 and S72 – Natural Gas Boilers #1-2

Emission Point	Emission Unit	EU ID	Maximum Capacity	m Capacity Control Equipment Description and ID		DNR Construction Permit
S71	Boiler #1	E98	180 MMBtu/hour, heat input	Low NO <sub>x</sub> Burners (C71)	Natural Gas	15-A-093-S2
S72	Boiler #2	E99	180 MMBtu/hour, heat input	Low NO <sub>x</sub> Burners (C72)	Natural Gas	15-A-094-S2

Associated Equipment:

### 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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S71 & S72	40% <sup>(1)</sup>	1.44 lb/hr	1.44 lb/hr	1.44 lb/hr, 0.2 lb/MMBtu	DNR Construction Permit 15-A-093-S2, 15-A-094-S2, 567 IAC 23.3(2)"b"(3), 567 IAC 23.3(2)"d"

<sup>(1)</sup>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: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 0.11 lb/hr, 500 ppmv Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 15-A-093-S2, 15-A-094-S2

Pollutant: Nitrogen Oxides (NO<sub>x</sub>)

Emission Limit(s): 7.20 lb/hr, 0.2 lb/MMBtu<sup>(2)</sup>(high heat release boiler)

Authority for Requirement: 40 CFR 60.44b(a)

567 IAC 23.1(2)"ccc"

DNR Construction Permit 15-A-093-S2, 15-A-094-S2

<sup>(2)</sup> As indicated in 40 CFR §60.44b(h), this limit applies at all times, including periods of startup, shutdown, and malfunction. In addition, as indicated in 40 CFR §60.44b(i), compliance with this limit is determined on a 30-day rolling average basis.

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 5.40 lb/hr Authority for Requirement: DNR Construction Permit 15-A-093-S2, 15-A-094-S2

## **NSPS Applicability**

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E98 & E99	Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	high heat release rate and natural gas fired	23.1(2)"ccc"	§60.40b - §60.49b

Authority for Requirement: DNR Construction Permit 15-A-093-S2, 15-A-094-S2 40 CFR 60 Subpart Db 567 IAC 23.1(2)"ccc"

### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

### Equipment Operation and NSPS Requirements

- A. Natural Gas Boilers E98 and E99 shall only combust natural gas.
- B. 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 maintain records of the following information for each steam generating unit operating day. This information shall be submitted in a report, as required in 40 CFR §60.49b(i).

1.Calendar date;

- 2. The average hourly NO<sub>x</sub> emission (as NO<sub>2</sub>) rates measured;
- 3. The 30-day average NO<sub>x</sub> emission rates calculated at the end of each steam generating unit operating day from the measured hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
- 4. Identification of the steam generating unit operating days when the calculated 30-day average  $NO_x$  emission rates are in excess of the  $NO_x$  emission standard in §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
- 5.Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
- 6.Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- 7.Identification of the "F"<sup>(1)</sup> factor used for calculations, method of determination, and type of fuel combusted;
- 8.Identification of the times when the pollutant concentration exceeds full span of the CEMS;
- 9.Description of any modifications to the CEMS that could affect the ability

of the CEMS to comply with Performance Specification 2 or 3; and 10. Results of daily CEMS drift tests and quarterly accuracy assessments as required in 40 CFR Appendix F, Procedure 1.

<sup>(1)</sup> Per 40 CFR §60.41b of Subpart Db, *annual capacity factor* "*F*" means the ratio between the actual heat input to a steam generating unit from the fuels listed in §60.42b(a), §60.43b(a), or §60.44b(a), as applicable, during a calendar year and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a calendar year at a maximum steady state design heat input capacity.

Authority for Requirement: DNR Construction Permit 15-A-093-S2, 15-A-094-S2

### **Emission Point Characteristics**

The emission points shall conform to the specifications listed below.

EP-S71 Stack Height, (ft, from the ground): 50 Stack Opening, (inches, dia.): 48 Exhaust Flow Rate (scfm): 32,800 Exhaust Temperature (°F): 280 Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-093-S2

EP-S72 Stack Height, (ft, from the ground): 50 Stack Opening, (inches, dia.): 48 Exhaust Flow Rate (scfm): 27,100 Exhaust Temperature (°F): 280 Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-094-S2

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

### **Monitoring Requirements**

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

Continuous Emission Monitoring Systems (CEMS)

- A. The owner or operator shall comply with the applicable monitoring requirements in 40 CFR Part 60, Subpart Db [§60.40b - §60.49b], including those not specifically mentioned in this permit.
  - i. In accordance with 40 CFR 60.48b(b)(1), the owner or operator shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring NO<sub>x</sub> and O<sub>2</sub> (or CO<sub>2</sub>) emissions discharged to the atmosphere from

EP-S71 and EP-S72. The owner or operator shall also record the output of the system.

- ii. In accordance with 40 CFR §60.48b(b)(c), the CEMS required by this permit shall be operated and the data recorded during all periods of operation including periods of startup, shutdown, malfunction, or emergency conditions, except for CEMS breakdowns, repairs calibration checks, and zero and span adjustments.
- iii. In accordance with 40 CFR 60.48b(b)(d), the 1-hour average NO<sub>x</sub> emission rates measured by the NO<sub>x</sub> CEMS required by 40 CFR 60.48b(b) and 60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission 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).
- B. The owner or operator shall follow the procedures in 40 CFR §60.13 for installation, evaluation, and operation of the CEMS.
- C. The CEMS required by this permit to monitor NO<sub>x</sub> emissions discharged to the atmosphere through EP-S71 and EP-S72 shall be designed to meet the requirements in 40 CFR Part 60, Appendix B, Performance Specification 2 (PS2) Specifications and Test Procedures for SO2 and NOx Continuous Emission Monitoring Systems in Stationary Sources and Performance Specification 6 (PS6) Specifications and Test Procedures for Continuous Emission Rate Monitoring Systems in Stationary Sources.
- D. The CEMS required by this permit shall comply with the applicable requirements in Appendix F to 40 CFR Part 60 Quality Assurance Procedures, including, but not limited to the following requirements:
  - i. The owner or operator shall develop and implement a quality control (QC) program. As a minimum, each QC program shall include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
    - 1.Calibration of the CEMS;
    - 2.Calibration drift determination and adjustment of the CEMS;
    - 3. Preventive maintenance of the CEMS (including spare parts inventory);
    - 4.Data recording, calculations, and reporting;
    - 5.Accuracy audit procedures including sampling and analysis methods; and 6.Program of corrective action for malfunctioning CEMS.
  - ii. Whenever excessive inaccuracies occur for two consecutive quarters, the owner or operator shall revise the current written procedures or shall modify or replace the CEMS to correct the deficiency causing the excessive inaccuracies.
  - iii. The owner or operator shall keep on-site a copy of these written procedures and shall make them available for inspection by the Department.
- E. The owner or operator shall conduct a Relative Accuracy Test Audit (RATA) at least once every four calendar quarters and shall submit RATA reports to the Department as indicated in this permit (see General Conditions G30).
  - i. If requested by the Department, the owner or operator shall coordinate the quarterly gas audits with the Department to afford the Department the opportunity to observe these audits. The relative accuracy test audits shall be coordinated with the Department.
- F. Per 40 CFR §60.48(b)(f), when NO<sub>x</sub> emission data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emission data will

be obtained by using standby monitoring systems, Method 7 of Appendix A of Part 60, Method 7A of Appendix A of Part 60, 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.

Authority for Requirement: DNR Construction Permit 15-A-093-S2, 15-A-094-S2

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

# **Emission Point ID Number: S90 – DDGS Loading**

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
E88	DDGS Conveyor	500 tons/hour			
E89	DDGS Elevator	15,000 bushels/hour			
E92	DDGS Loadout Conveyor	37,500 bushels/hour	Pulse Jet Baghouse (C90)	DDGS	15-A-095-S1
E93	DDGS Loadout #1	37,500 bushels/hour (total)			
E94	DDGS Loadout #2	57,500 busilets/flour (total)			

Associated Equipment:

#### 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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S90	40% <sup>(1)</sup>	0.69 lb/hr	0.69 lb/hr	0.69 lb/hr, 0.1 gr/dscf	DNR Construction Permit 15-A-095-S1, 567 IAC 23.4(7), 567 IAC 23.3(2)"d"

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

Pollutant: Hazardous Air Pollutants (HAP), Individual

Emission Limit(s): 0.01 lb/hr<sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 15-A-095-S1

<sup>(2)</sup> 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 three HAPs.

Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 0.03 lb/hr Authority for Requirement: DNR Construction Permit 15-A-095-S1

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The facility is limited to shipping no more than a facility wide total of 487,500 tons of DDGS out of the facility per rolling 12-month period.
- B. The facility shall calculate on a monthly basis the amount of DDGS shipped out of the facility. The facility shall calculate and record the 12-month rolling total amount of DDGS

shipped out of the facility.

- C. The control equipment, CE C90, shall be operated and maintained according to the manufacturer's recommendations with inspections occurring at a minimum of once per calendar year.
- D. 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:
  - 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 15-A-095-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 160 Stack Opening, (inches, dia.): 14 Exhaust Flow Rate (scfm): 20,000 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 15-A-095-S1

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

#### **Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🛛 No 🗌
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

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

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

*least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.* 

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

# **Emission Point ID Number: S100 – DDGS Cooling Drum**

Emission Unit	EU ID	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
E87	DDGS Cooling Drum	55.65 tons DDGS/hour	Baghouse (C70)	DDGS	17-A-071-S1

Associated Equipment

# **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.

Emission Point	Opacity	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
S100	40 %	1.30 lb/hr	1.30 lb/hr	1.30 lb/hr, 0.1 gr/dscf	DNR Construction Permit 17-A-071-S1, 567 IAC 23.4(7), 567 IAC 23.3(2)"d"

<sup>(1)</sup> 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: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 5.0 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 12.66 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

Pollutant: Acetaldehyde Emission Limit(s): 0.31 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

Pollutant: Acrolein Emission Limit(s): 0.06 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

Pollutant: Formaldehyde Emission Limit(s): 0.06 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1 Pollutant: Methanol Emission Limit(s): 0.06 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 0.46 lb/hr Authority for Requirement: DNR Construction Permit 17-A-071-S1

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

Equipment Operation

- A. The owner or operator shall operate the baghouse (C70) at all times that the DDGS Cooling Drum (E87) is in operation.
- B. The pressure drop across the baghouse (C70) shall be maintained between the minimum value (inches water column) observed during the most recent approved compliance test and 10 inches water column during normal operation conditions, i.e., excluding periods of startup, shutdown, and malfunction.
  - 1. The owner or operator shall collect and record the pressure drop, in inches of water column, across the baghouse (C70) on a daily basis while the baghouse is in operation.
  - 2. If the pressure drop across the baghouse falls outside the required range, the owner or operator shall record the date and actions taken to correct the situation and shall record when the pressure drop is back within the required range.
  - 3. The owner or operator shall maintain on-site a copy of the most recent compliance test report that demonstrated compliance with the emission limitations. This report shall include the average pressure drop (inches water column) across the baghouse (C70) observed during testing.

#### Control Equipment Monitoring Requirements

- C. The owner or operator shall inspect and maintain the baghouse (C70) according to the manufacturer's specifications with inspections occurring at a minimum of once per calendar year.
  - i. The owner or operator shall keep a log of all maintenance and inspection activities performed on the baghouse (C70). At a minimum, this log shall include:
    - 4. The date that any inspection and/or maintenance was performed on the baghouse;
    - 5. Any issues identified during any inspection and maintenance activities and the date each issue was resolved; and
    - 6.Identification of the staff member performing the maintenance activities.

Authority for Requirement: DNR Construction Permit 17-A-071-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 50 Stack Opening, (inches, dia.): 48 Exhaust Flow Rate (scfm): 38,000 Exhaust Temperature (°F): Ambient Discharge Style: vertical, unobstructed Authority for Requirement: DNR Construction Permit 17-A-071-S1

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

#### **Monitoring Requirements**

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

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
HAP <sup>(1)</sup>	Stack Testing	Once Every Year	1 hour	40 CFR 63, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18

<sup>(1)</sup> HAP periodic testing to demonstrated compliance with the applicable emission limits of this permit shall be completed once every year. HAP periodic testing shall be completed during the months of June, July, or August, while all affected equipment is operating in a worst-case scenario, e.g., highest production rate, highest exhaust flow rate, etc. Acetaldehyde, acrolein, formaldehyde, and methanol shall be tested for specifically. The specified HAP that tests below the detection limit shall be assumed to be emitting at a rate equal to the detection limit. The HAP most recent stack test was conducted on June 11, 2019; therefore, the next test shall be completed in June, July, or August of Year 2020.

Authority for Requirement: DNR Construction Permit 17-A-071-S1

Agency Approved Operation & Maintenance Fian Required. $10 \ge 10 \ge$	Agency	<b>Approved Operation</b>	& Maintenance Plan Required?	Yes 🖂 No 🗌
--	--------	---------------------------	------------------------------	------------

Operating Requirements contain monitoring equivalent to Agency O & M plan for baghouse C70.

Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Compliance Assurance Monitoring (CAM) Plan Required?	Yes 🗌 No 🖂

# **Emission Point ID Number:** S110 – Fire Pump Engine

Emission Unit	EU ID	Maximum Capacity	Raw Material	DNR Construction Permit
FWP	Fire Pump Engine	365.9 bhp; 6.44 liters/cylinder	Diesel	NA

#### Associated Equipment

# **Applicable Requirements**

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

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

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

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 2.5 lb/MMBtu Authority for Requirement: 567 IAC 23.3(3)"b"(2)

#### **NESHAP Applicability**

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

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

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

## **Operating Requirements with Associated Monitoring and Recordkeeping**

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

#### **NSPS Subpart IIII Requirements**

#### <u>For emergency (FP) CI engines with Disp. < 30 l/cyl constructed after 7/11/2005 and</u> <u>manufactured after 7/1/2006:</u>

#### **Emission Standards:**

According to 40 CFR 60.4205(c) and Table 4 to Subpart IIII, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Maximum Engine Power	Model Year(s)	NMHC + NOx	СО	PM
$130 \le kW \le 560$ (175 \le HP \le 750)	2009+	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)

#### Fuel Requirements:

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

#### Compliance Requirements:

- 1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and
  - c) Meeting the requirements of 40 CFR 89, 94 and/or 1068, as they apply to you.
- 2. You must demonstrate compliance with the applicable emission standards by purchasing an engine certified to the applicable emission standards. The engine must be installed and configured according to the manufacturer's emission-related specifications. 40 CFR 60.4211(c).
- 3. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct the following performance testing in accordance with 40 CFR 60.4212 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 30 days prior to the test date and are required to submit a stack test report to the DNR within 60 days after the completion of the testing. See 40 CFR 60.4211(g) for additional information.

Maximum Engine Power	Initial Test	Subsequent Test
$100 \le HP \le 500$	Within 1 year of engine startup, or non-permitted action <sup>(1)</sup>	Not required

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

Operating and Recordkeeping Requirements

If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 40.4209(a)) and, starting with the model years in the following table, you must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. 40 CFR 40.4214(b).

Engine power	Starting model year
$130 \le KW \ (175 \le HP)$	2011

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

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

# **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

47

# Emission Point ID Number: FUG3 – Fugitive Emissions from Equipment Leaks

Associated Equipment

Emission Unit	EU ID	Control Equipment Description and ID	Raw Material	DNR Construction Permit
FUG3 Fugitive Emissions from Equipment Leaks		Leak Detection and Repair	Ethanol	15-A-105-S3

# **Applicable Requirements**

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

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

Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 5.11 tons/yr<sup>(1)</sup> Authority for Requirement: DNR Construction Permit 15-A-105-S3

Pollutant: Acetaldehyde Emission Limit(s): 0.12 tons/yr<sup>(1)</sup> Authority for Requirement: DNR Construction Permit 15-A-105-S3

Pollutant: Hazardous Air Pollutants (HAP), Total Emission Limit(s): 0.63 tons/yr<sup>(1)(2)</sup> Authority for Requirement: DNR Construction Permit 15-A-105-S3 <sup>(1)</sup> Annual emissions are based on maximum component count. <sup>(2)</sup> Total HAP emissions include acetaldehyde, acrolein, formaldehyde, hexane, and methanol.

# **NSPS Applicability**

EU ID	Subpart Title		State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	23.1(2)	§60.1 – §60.19
FUG3	VVa	NSPS for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification commenced after November 7, 2006	23.1(2)"nn"	§60.480a – §60.489a

Authority for Requirement: DNR Construction Permit 15-A-105-S3

### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subpart VVa [§60.480a 60.489a], including those not specifically mentioned in this permit.
- B. The owner or operator shall comply with the applicable recordkeeping and reporting requirements in §60.486a and §60.487a, respectively.
- C. The owner or operator shall document the number and types of components used. Components include, but are not limited to valves, pumps, compressors seals, flanges, and connectors.
  - i. The owner or operator shall update the component count whenever the number of components changes.
- D. The owner or operator shall calculate and record, on an annual basis, the facility's VOC emissions, in tons, using the documented component count and the calculation methods outlined in EPA's document 453/R-95-017 titled: *Protocol for Equipment Leak Emission Estimates* (Pages 2-10 through 2-38).
- E. The owner or operator shall calculate and record on an annual basis the facility's Single HAP and Total HAP emissions, in tons, using the HAP to VOC vapor mass ratio based on:
  - i. Stack test results obtained during the most recent performance tests for fermentation and distillation that demonstrated compliance with the applicable emission limits.
  - ii. Speciated HAP emission rates from product loadout, ethanol fuel product storage tanks, and denaturant storage tank.
- F. The owner or operator shall keep on-site the documentation necessary to justify the component count, the LDAR control effectiveness for each component type, VOC and HAP emission rates, and the HAP to VOC vapor mass ratio used in the emissions from equipment leak calculations.

Authority for Requirement: DNR Construction Permit 15-A-105-S3

#### **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 🖂

# **Emission Point ID Number: FUG4 – Fugitive Dust Plant Haul Roads**

Associated Equipment

Emission Unit	EU ID	Control Equipment Description and ID	Raw Material	DNR Construction Permit
FUG4	Fugitive Dust Plant Haul Roads	Dust Suppression	Silt	15-A-106-S1

#### Applicable Requirements

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

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

Pollutant: Opacity Emission Limit(s): <sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(2)"c"(1)

DNR Construction Permit 15-A-106-S1

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

Pollutant: Particulate Matter - State

Emission Limit(s): <sup>(2)</sup>

Authority for Requirement: DNR Construction Permit 15-A-106-S1

<sup>(2)</sup> Particulate matter emissions will be calculated based on tested silt content, number of trucks, (assuming trucks will be empty half of the miles traveled), and 0.75 miles per delivery or loadout. See Operating Requirements for the calculation details.

#### **Operational Requirements with Associated Monitoring and Recordkeeping**

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

- A. The haul roads must be paved. Truck traffic on the haul road shall not exceed 10 mph. The speed limit shall be posted on the haul road. Any spills on the road shall be cleaned up immediately.
- B. Truck traffic emissions on the paved road shall be controlled by sweeping with an enclosed broom sweeper at least three days per week. Daily water flushing followed by sweeping shall be required should the emissions from the haul roads exceed 20 tons on a rolling 12-month basis, as determined in Condition C.
  - i. If water flushing followed by sweeping cannot be accomplished because the ambient air temperature (as measured at the facility during daylight operating hours) will be less than  $35^{\circ}$  F ( $1.7^{\circ}$  C) only sweeping is required. Water flushing followed by sweeping is not required for days of inclement weather.
  - ii. Sweeping or water flushing followed by sweeping need not occur when a rain gauge located at the site indicates that at least 0.2 inches of precipitation (water equivalent) has occurred within the preceding 24-hr time period.
  - iii. Sweeping or water flushing followed by sweeping need not occur if the plant does

not receive any truck traffic that day (i.e. on a weekend, holiday, etc.).

- Water flushing followed by sweeping need not occur provided that the haul road emissions do not exceed 20.0 tons PM for the last twelve month rolling period. Haul road emissions shall be calculated using the formula in Condition E of this permit. In the event that emissions exceed 20.0 tons during the last twelve month rolling period, the plant shall be required to commence daily water flushing followed by sweeping until PM emissions fall below 20.0 tons per 12-month rolling period.
- v. The frequency of sweeping with an enclosed broom sweeper shall increase from at least three days per week to daily if the haul road emissions exceed 2.05 tons PM per 12-month rolling period. Daily sweeping shall be required until the rolling 12-month PM emissions are below 2.05 tons.
- C. The plant shall maintain a log for the haul roads that show the following:
  - i. The silt content of the road for that month;
  - ii. The date of performance (silt load) testing;
  - iii. The number of trucks that unload/load material for that month;
  - iv. Each day record whether or not water flushing and sweeping was accomplished. For days without water flushing and/or sweeping record the circumstances (i.e. weather condition, equipment malfunction); and,
  - v. The operator's initials.
- D. The owner or operator shall perform monthly site specific silt loading performance testing. For each performance test, silt load  $(g/m^2)$  sampling shall be done at a minimum of 3 different locations to determine emissions. Performance testing shall be completed prior to water flushing and/or sweeping. After 12 consecutive monthly silt loading performance tests with measured surface silt loading results less than 2 g/m<sup>2</sup>, the owner or operator may switch to quarterly silt loading performance testing.
- E. The owner or operator shall calculate and record the monthly fugitive dust emissions according to the following formula, which uses the equations from AP-42 Section 13.2.1 (January 2011), the PM empirical constants, and assumes a mean vehicle weight of 27.5 tons and an average of 0.75 miles per truck delivery or loadout.
  - $E = (V * 0.75) * (1.62 \times 10^{-4}) * (sL)^{0.91}$ 
    - Where E = tons PM/month
    - V = number of trucks that month
    - $sL = surface silt loading in g/m^2$  from that month's test results,
- F. The owner or operator shall update monthly the twelve month rolling total PM emissions by adding up the calculated monthly emissions for the previous twelve months. Immediately notify the DNR if the twelve month rolling total exceeds 25.0 tons.

Authority for Requirement: DNR Construction Permit 15-A-106-S1

#### **Monitoring Requirements**

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

Pollutant	Compliance Methodology	Frequency	Test Run Time	Test Method
PM – State	Silt Testing <sup>(1)</sup> , Recordkeeping <sup>(2)</sup>	Monthly Basis <sup>(1)</sup> , Rolling 12-Month Total	1 hour	40 CFR 60, Appendix A, Method 5 40 CFR 51 Appendix M Method 202
Opacity	None	NA	1 hour	40 CFR 60, Appendix A, Method 9

#### **Compliance Demonstration Table**

<sup>(1)</sup> See Operating Requirement Condition D for the performance testing requirements.

<sup>(2)</sup> See Operating Requirements of the permit for the required recordkeeping requirements.

Authority for Requirement: DNR Construction Permit 15-A-106-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 🖂

# **Emission Point ID Number: F81 – Cooling Tower**

#### Associated Equipment

Emissio n Unit	EU ID	Maximum Rated Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
E81	Cooling Tower (4 cells)	55,000 gallons/minute (total)	Mist Eliminator (C81) Total Drift Loss = 0.005%	Water	15-A-096-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.

Emission Point	PM-2.5	PM-10	Particulate Matter	Authority for Requirement
F81	3.44 lb/hr <sup>(1)</sup>	3.44 lb/hr <sup>(1)</sup>	3.44 lb/hr <sup>(1)</sup> , 0.1 gr/dscf	DNR Construction Permit 15-A-096-S1, 567 IAC 23.3(2)"a"

<sup>(1)</sup> PM, PM<sub>10</sub> and PM<sub>2.5</sub> are assumed to be equivalent. The limit is based on a drift loss of 0.005% and total dissolved solids (TDS) limit of 2,500 part per million by weight (2,500 mg/L). Compliance demonstration is based on mass balance approach (See Operating Requirements).

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The circulating water in the cooling tower shall not exceed 2500 parts per million (ppm) total dissolved solids (TDS).
  - i. Monitoring of the TDS shall be conducted, at a minimum, on a quarterly schedule. Testing includes conductivity testing with a correlation to determine the TDS concentration
  - ii. The owner or operator shall maintain records on-site of the TDS concentration in the cooling tower circulating water. Records shall also be kept of the dates of measurement and the methods used to determine the concentration of the TDS in the cooling water.
  - B. The Mist Eliminator (C81) shall be designed to meet a control efficiency of 0.005% (gallons of drift per gallon of cooling water flow) or better.
    - i. The cooling tower shall be operated and maintained per the facility's (Plant ID 15-01-042) operating and maintenance plans with inspections occurring at a minimum of once per calendar year.
    - ii. The owner or operator shall maintain a log of all maintenance and inspection activities performed on the emission unit, EU E81, and control equipment, C81. This log shall include, but is not limited to:
      - a) The date and time any inspection and/or maintenance was performed on the

emission unit and/or control equipment;

- b) Any issue(s) identified during the inspection and the date each issue(s) was resolved;
- c) Any issue(s) addressed during the maintenance activities and the date each issue(s) was resolved; and,
- C. The owner or operator shall use no water treatment chemicals that contain chromium or VOC compounds. The owner or operator shall maintain MSDS, or equivalent technical sheets, for all water treatment chemicals used in the cooling tower.

Authority for Requirement: DNR Construction Permit 15-A-096-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 40 Stack Outlet Dimensions, (inches): 396 (per cell) Exhaust Flow Rate (acfm): 1,140,000 (per cell) Exhaust Temperature (°F): 85 Discharge Style: Vertical, Unobstructed Authority for Requirement: DNR Construction Permit 15-A-096-S1

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

#### **Monitoring Requirements**

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

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

# **Emission Point ID Number:** T1 – 190 Proof Ethanol Storage Tank

Asso	ciated Equipment				
Emissio n Unit	EU ID	Maximum Rated Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
E45	190 Proof Ethanol Storage Tank	200,000 gallons; 800 gallons/minute	Internal Floating Roof (C45)	Ethanol	15-A-098-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.

There are no applicable emission limits at this time.

#### **NSPS** Applicability

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E45	Kb	NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity > 151 m <sup>3</sup> Max true vapor pressure: >5.2 and <76.6 kPa	23.1(2)"ddd"	§60.110b – §60.117b

Authority for Requirement: DNR Construction Permit 15-A-098-S2 40 CFR 60 Subpart Kb 567 IAC 23.1(2)"ddd"

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The maximum material throughput for the 190 Proof Ethanol Storage Tank (T1) shall not exceed 235 million gallons per rolling 12-month period.
  - i. The owner or operator shall record the total material throughout, in gallons, for E45 on a monthly basis.
  - ii. The owner or operator shall calculate and record the total material throughput, in gallons, for E45 on a rolling 12-month basis.
- B. The owner or operator shall comply with the applicable standards in 40 CFR Part 60,

Subparts A and Kb, including those not specifically mentioned in this permit.

- i. The owner or operator shall follow the applicable standards in 40 CFR §60.112b(a)(1) of Subpart Kb.
- ii. The owner or operator shall comply with the applicable inspection procedures in 40 CFR §60.113b(a) of Subpart Kb.
- iii. The owner or operator shall comply with the applicable reporting and recordkeeping requirements in 40 CFR §60.115b(a) of Subpart Kb.
- iv. Per 40 CFR §60.116b(b) of Subpart Kb, the owner or operator shall keep readily accessible records showing the dimension of the 190 Proof Ethanol Storage Tank (E45) and an analysis showing the capacity of this storage vessel.

1. The owner or operator shall keep records and analysis for the life of the 190 Proof Ethanol Storage Tank (E45).

- C. Per 40 CFR 60.116b(c) of Subpart Kb, the owner or operator shall maintain the following monthly records:
  - i. The name of the material stored in the 190 Proof Ethanol Storage Tank (E45);
  - ii. The beginning and end dates for each month; and
  - iii. The maximum true vapor pressure of the material stored in the 190 Proof Ethanol Storage Tank (E45) during each month.
  - iv. The owner or operator shall determine the maximum true vapor pressure of the material stored in the 190 Proof Ethanol Storage Tank (E45) by following the applicable procedure in 40 CFR §60.116b(e).

Authority for Requirement: DNR Construction Permit 15-A-098-S2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33.25 Stack Opening, (inches, dia.): 10 Exhaust Flow Rate (scfm): Working and Breathing Losses Exhaust Temperature (°F): Ambient Discharge Style: Downward Authority for Requirement: DNR Construction Permit 15-A-098-S2

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

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

#### **<u>Compliance Demonstration Table</u>**

Pollutant	Compliance Methodology	Frequency
VOC	Material throughput recordkeeping	12-month rolling

Authority for Requirement: DNR Construction Permit 15-A-098-S2

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

# **Emission Point ID Number: T2 – 200 Proof Ethanol Storage Tank**

Asso	Associated Equipment								
Emissio n Unit	EU ID	Maximum Rated Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit				
E56	190 Proof Ethanol Storage Tank	200,000 gallons; 300 gallons/minute	Internal Floating Roof (C56)	Ethanol	15-A-099-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.

There are no applicable emission limits at this time.

#### **NSPS** Applicability

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E56	Kb	NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity > 151 m <sup>3</sup> Max true vapor pressure: >5.2 and <76.6 kPa	23.1(2)"ddd"	§60.110b – §60.117b

#### Authority for Requirement: DNR Construction Permit 15-A-099-S2 40 CFR 60 Subpart Kb 567 IAC 23.1(2)"ddd"

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The maximum material throughput for the 200 Proof Ethanol Storage Tank (E56) shall not exceed 171.5 million gallons per rolling 12-month period.
  - i. The owner or operator shall record the total material throughout, in gallons, for E56 on a monthly basis.
  - ii. The owner or operator shall calculate and record the total material throughput, in gallons, for E56 on a rolling 12-month basis.

- B. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subparts A and Kb, including those not specifically mentioned in this permit.
  - i. The owner or operator shall follow the applicable standards in 40 CFR §60.112b(a)(1) of Subpart Kb.
  - ii. The owner or operator shall comply with the applicable inspection procedures in 40 CFR §60.113b(a) of Subpart Kb.
  - iii. The owner or operator shall comply with the applicable reporting and recordkeeping requirements in 40 CFR §60.115b(a) of Subpart Kb.
  - iv. Per 40 CFR §60.116b(b) of Subpart Kb, the owner or operator shall keep readily accessible records showing the dimension of the 200 Proof Ethanol Storage Tank (E56) and an analysis showing the capacity of this storage vessel.

1. The owner or operator shall keep records and analysis for the life of the 200 Proof Ethanol Storage Tank (E56).

- C. Per 40 CFR 60.116b(c) of Subpart Kb, the owner or operator shall maintain the following monthly records:
  - i. The name of the material stored in the 200 Proof Ethanol Storage Tank (E56);
  - ii. The beginning and end dates for each month; and
  - iii. The maximum true vapor pressure of the material stored in the 200 Proof Ethanol Storage Tank (E56) during each month.
  - iv. The owner or operator shall determine the maximum true vapor pressure of the material stored in the 200 Proof Ethanol Storage Tank (E56) by following the applicable procedure in 40 CFR §60.116b(e).

Authority for Requirement: DNR Construction Permit 15-A-099-S2

# **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33.25 Stack Opening, (inches, dia.): 10 Exhaust Flow Rate (scfm): Working and Breathing Losses Exhaust Temperature (°F): Ambient Discharge Style: Downward Authority for Requirement: DNR Construction Permit 15-A-099-S2

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

# **Monitoring Requirements**

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

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency
VOC	Material throughput recordkeeping	12-month rolling

Authority for Requirement: DNR Construction Permit 15-A-099-S2

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

# **Emission Point ID Numbers: T3, T4, T5 – Ethanol Fuel Product Storage** Tanks #1-3

Assoc	Associated Equipment:							
Emission Point	Emission Unit	EU Description	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit		
Т3	E57	Ethanol Fuel Product Storage Tank #1	2 million gallons	Internal Floating Roof (C57)		15-A-100-S2		
T4	E58	Ethanol Fuel Product Storage Tank #2	2 million gallons	Internal Floating Roof (C58)	Ethanol	15-A-101-S2		
T5	E59	Ethanol Fuel Product Storage Tank #3	2 million gallons	Internal Floating Roof (C59)		15-A-102-S2		

# **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.

There are no applicable emission limits at this time.

#### **NSPS Applicability**

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E57, E58, E59	Kb	NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity > 151 m <sup>3</sup> Max true vapor pressure: >5.2 and <76.6 kPa	23.1(2)"ddd"	§60.110b – §60.117b

Authority for Requirement: DNR Construction Permit 15-A-100-S2, 15-A-101-S2, 15-A-102-S2

40 CFR 60 Subpart Kb 567 IAC 23.1(2)"ddd"

## **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The combined material throughput for Ethanol Fuel Product Storage Tanks #1 (E57), #2 (E58), and #3 (E59) shall not exceed 175 million gallons per rolling 12-month basis.
  - i. The owner or operator shall record the total material throughput, in gallons, for E57, E58, and E59 (combined) on a monthly basis.
  - ii. The owner or operator shall calculate and record the total material throughput, in gallons, for E57, E58, and E59 (combined) on a rolling 12-month basis.
- B. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subparts A and Kb, including those not specifically mentioned in this permit.
  - i. The owner or operator shall follow the applicable standards in 40 CFR §60.112b(a)(1) of Subpart Kb.
  - ii. The owner or operator shall comply with the applicable inspection procedures in 40 CFR §60.113b(a) of Subpart Kb.
  - iii. The owner or operator shall comply with the applicable reporting and recordkeeping requirements in 40 CFR §60.115b(a) of Subpart Kb.
  - iv. Per 40 CFR §60.116b(b) of Subpart Kb, the owner or operator shall keep readily accessible records showing the dimension of each of the storage vessels and an analysis showing the capacity of each storage vessel.
    - 1. The owner or operator shall keep records and analysis for the life of each of the storage vessels described.
- C. Per 40 CFR 60.116b(c) of Subpart Kb, the owner or operator shall maintain the following monthly records:
  - i. The name of the material stored in each of the storage vessels;
  - ii. The beginning and end dates for each month; and
  - iii. The maximum true vapor pressure of the material stored in each of the storage vessels during each month.
- D. The owner or operator shall determine the maximum true vapor pressure of the material stored in each of the storage vessels by following the applicable procedure in 40 CFR §60.116b(e).

Authority for Requirement: DNR Construction Permit 15-A-100-S2, 15-A-101-S2, 15-A-102-S2

### **Emission Point Characteristics**

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 56.25 Stack Opening, (inches, dia.): 10 Exhaust Flow Rate (scfm): Working and Breathing Losses Exhaust Temperature (°F): Ambient Discharge Style: Downward Authority for Requirement: DNR Construction Permit 15-A-100-S2, 15-A-101-S2, 15-A-102-S2

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

#### **Monitoring Requirements**

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

#### **Compliance Demonstration Table**

EP	Pollutant	Compliance Methodology	Frequency
Т3,	VOC	Material throughput recordkeeping	12-month rolling
T4, T5	НАР	Material throughput recordkeeping	12-month rolling

Authority for Requirement: DNR Construction Permit 15-A-100-S2, 15-A-101-S2, 15-A-102-S2

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

# **Emission Point ID Number: T6 – Denaturant Storage Tank**

Associated Equipment:

Emission Unit	EU Description	Maximum Capacity	Control Equipment Description and ID	Raw Material	DNR Construction Permit
E60	Denaturant Storage Tank	200,000 gallons; 200 gallons/minute	Internal Floating Roof (C60)	Denaturant	15-A-103-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.

There are no applicable emission limits at this time.

#### **NSPS** Applicability

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
E60	Kb	NSPS for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	Capacity > 151 m <sup>3</sup> Max true vapor pressure: >5.2 and <76.6 kPa	23.1(2)"ddd"	§60.110b – §60.117b

#### Authority for Requirement: DNR Construction Permit 15-A-103-S2 40 CFR 60 Subpart Kb 567 IAC 23.1(2)"ddd"

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The owner or operator shall only receive natural gasoline to be used as an ingredient or denaturant in the ethanol fuel product loaded out at Plant No. 15-0-042.
  - i. The owner or operator shall maintain on-site purchase records and manufacturer/vendor provided information (Safety Data Sheets, technical data sheets, etc.) for the natural gasoline received at the facility.
- B. The maximum material throughput for the Denaturant Storage Tank (E60) shall not exceed

- 4.375 million gallons per rolling 12-month period.
  - i. The owner or operator shall record the total material throughout, in gallons, for E60 on a monthly basis.
  - ii. The owner or operator shall calculate and record the total material throughput, in gallons, for E60 on a rolling 12-month basis.
- C. The owner or operator shall comply with the applicable standards in 40 CFR Part 60, Subparts A and Kb, including those not specifically mentioned in this permit.
  - i. The owner or operator shall follow the applicable standards in 40 CFR §60.112b(a)(1) of Subpart Kb.
  - ii. The owner or operator shall comply with the applicable inspection procedures in 40 CFR §60.113b(a) of Subpart Kb.
  - iii. The owner or operator shall comply with the applicable reporting and recordkeeping requirements in 40 CFR §60.115b(a) of Subpart Kb.
  - iv. Per 40 CFR §60.116b(b) of Subpart Kb, the owner or operator shall keep readily accessible records showing the dimension of the Denaturant Storage Tank (E60) and an analysis showing the capacity of this storage vessel.
    - 1. The owner or operator shall keep records and analysis for the life of the Denaturant Storage Tank (E60).
- D. Per 40 CFR 60.116b(c) of Subpart Kb, the owner or operator shall maintain the following monthly records:
  - i. The name of the material stored in the Denaturant Storage Tank (E60);
  - ii. The beginning and end dates for each month; and
  - iii. The maximum true vapor pressure of the material stored in the Denaturant Storage Tank (E60) during each month.
    - 1. The owner or operator shall determine the maximum true vapor pressure of the material stored in the Denaturant Storage Tank (E60) by following the applicable procedure in 40 CFR §60.116b(e).

Authority for Requirement: DNR Construction Permit 15-A-103-S2

#### **Emission Point Characteristics**

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 33.25
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): Working and Breathing Losses
Exhaust Temperature (°F): Ambient
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 15-A-103-S2

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

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

#### **Compliance Demonstration Table**

Pollutant	Compliance Methodology	Frequency
VOC	Material throughput recordkeeping	12-month rolling
HAP	Material throughput recordkeeping	12-month rolling

Authority for Requirement: DNR Construction Permit 15-A-103-S2

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

# **Emission Point ID Number: T7 – Corrosion Inhibitor Storage Tank**

Associated Equipment:

Emission Unit	EU Description	Maximum Capacity	Raw Material	DNR Construction Permit
E61	Corrosion Inhibitor Storage Tank	2,300 gallons	Corrosive Inhibitor	15-A-104-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.

There are no applicable emission limits at this time.

#### **Operating Requirements with Associated Monitoring and Recordkeeping**

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

- A. The maximum material throughput for the Corrosion Inhibitor Storage Tank (E61) shall not exceed 4,100 gallons per rolling 12-month period.
  - i. The owner or operator shall record the total material throughout, in gallons, for E61 on a monthly basis.
  - ii. The owner or operator shall calculate and record the total material throughput, in gallons, for E61 on a rolling 12-month basis.
- B. The product of the maximum true vapor pressure and the molecular weight of each HAPcontaining material stored in the Corrosion Inhibitor Storage Tank (E61) shall not exceed 0.02 psia · lb / lb · mol.
  - i. The owner or operator shall maintain on-site manufacturer and vendor provided information (Safety Data Sheets, technical data sheets, etc.) for all HAP-containing materials stored in the Corrosion Inhibitor Storage Tank (E61).
  - ii. The owner or operator shall document the product of the maximum true vapor pressure and the molecular weight of each HAP-containing material stored in the Corrosion Inhibitor Storage Tank (E61).

Authority for Requirement: DNR Construction Permit 15-A-104-S1

#### **Emission Point Characteristics**

The emission points shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 9.5
Stack Opening, (inches, dia.): 2
Exhaust Flow Rate (scfm): Working and Breathing Losses
Exhaust Temperature (°F): Ambient
Discharge Style: Downward
Authority for Requirement: DNR Construction Permit 15-A-104-S1

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

#### **Monitoring Requirements**

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

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

#### **IV. General Conditions**

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

#### G1. Duty to Comply

1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"

2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h''(3)

3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"

4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)

5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"

6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

#### G2. Permit Expiration

1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source's right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 *IAC 22.116(2)* 

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

#### **G3.** Certification Requirement for Title V Related Documents

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

#### **G4. Annual Compliance Certification**

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

#### G5. Semi-Annual Monitoring Report

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of

deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

#### **G6.** Annual Fee

1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.

2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.

3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.

4. The fee shall be submitted annually by July 1 with forms specified by the department.

5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.

6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.

7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.

8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

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

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

1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. *567 IAC 22.108 (15)"b"* 

#### **G8. Duty to Provide Information**

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

#### **G9.** General Maintenance and Repair Duties

The owner or operator of any air emission source or control equipment shall:

1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.

2. Remedy any cause of excess emissions in an expeditious manner.

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.
 Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process

4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

#### G10. Recordkeeping Requirements for Compliance Monitoring

1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:

- a. The date, place and time of sampling or measurements
- b. The date the analyses were performed.
- c. The company or entity that performed the analyses.
- d. The analytical techniques or methods used.

e. The results of such analyses; and

f. The operating conditions as existing at the time of sampling or measurement.

g. The records of quality assurance for continuous compliance monitoring systems (including but not

limited to quality control activities, audits and calibration drifts.)

2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.

3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:

a. Comply with all terms and conditions of this permit specific to each alternative scenario.

b. Maintain a log at the permitted facility of the scenario under which it is operating.

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

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

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

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

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

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

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

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

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

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

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

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

#### G13. Hazardous Release

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

#### G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the

case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

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

ii. The estimated quantity of the excess emission.

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

iv. The cause of the excess emission.

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

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

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

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

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

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

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

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

3. Emergency Defense for Excess Emissions. For the purposes of this permit, an "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include non-compliance, to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation or operator error. An emergency constitutes an affirmative defense to an action brought for non-compliance with technology based limitations if it can be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that:

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

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

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

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

In any enforcement proceeding, the permittee seeking to establish the occurrence of an

emergency has the burden of proof. This provision is in addition to any emergency or upset provision contained in any applicable requirement. 567 IAC 22.108(16)

#### **G15.** Permit Deviation Reporting Requirements

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

**G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations** During the term of this permit, the permittee must notify the department of any source that becomes subject to a standard or other requirement under 567-subrule 23.1(2) (standards of performance of new stationary sources) or section 111 of the Act; or 567-subrule 23.1(3) (emissions standards for hazardous air pollutants), 567-subrule 23.1(4) (emission standards for hazardous air pollutants for source categories) or section 112 of the Act. This notification shall be submitted in writing to the department pursuant to the notification requirements in 40 CFR Section 60.7, 40 CFR Section 61.07, and/or 40 CFR Section 63.9. 567 IAC 23.1(2), 567 IAC 23.1(3), 567 IAC 23.1(4)

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

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

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

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

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

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

e. The changes comply with all applicable requirements.

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

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

ii. The date on which the change will occur,

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

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit. vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V

permit; and

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

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

Notwithstanding any other part of this rule, the director may, upon review of a notice, require a stationary source to apply for a Title V permit if the change does not meet the requirements of subrule 22.110(1). 567 IAC 22.110(3)
 The permit shield provided in subrule 22.108(18) shall not apply to any change made pursuant to this rule. Compliance with the permit requirements that the source will meet using the emissions trade shall be determined according to requirements of the state implementation plan authorizing the emissions trade. 567 IAC 22.110(4)
 No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes, for changes that are provided for in this permit. 567 IAC 22.108(11)

#### G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

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

i. Correct typographical errors

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

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

iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.

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

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

2. Minor Title V Permit Modification.

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

i. Do not violate any applicable requirement;

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

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

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

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

vi. Are not required to be processed as significant modification under rule 567 - 22.113(455B). b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:

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

ii. The permittee's suggested draft permit;

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

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

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

3. Significant Title V Permit Modification.

Significant Title V modification procedures shall be used for applications requesting Title V permit modifications that do not qualify as minor Title V modifications or as administrative amendments. These include but are not limited to all significant changes in monitoring permit terms, every relaxation of reporting or recordkeeping permit terms, and any change in the method of measuring compliance with existing requirements. Significant Title V modifications shall meet all requirements of 567 IAC Chapter 22, including those for applications, public

participation, review by affected states, and review by the administrator, as those requirements that apply to Title V issuance and renewal.

The permittee shall submit an application for a significant permit modification not later than three months after commencing operation of the changed source unless the existing Title V permit would prohibit such construction or change in operation, in which event the operation of the changed source may not commence until the department revises the permit. *567 IAC 22.111-567 IAC 22.113* 

#### **G19.** Duty to Obtain Construction Permits

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

#### G20. Asbestos

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

#### G21. Open Burning

The permittee is prohibited from conducting open burning, except as provided in 567 IAC 23.2. 567 IAC 23.2 <u>except</u> 23.2(3)"j"; 567 IAC 23.2(3)"j" - State Only

#### G22. Acid Rain (Title IV) Emissions Allowances

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

#### G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:

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

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

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

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

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

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

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

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

d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152) e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.

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

3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to

any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

#### **G24.** Permit Reopenings

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

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

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

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

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

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

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

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

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

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

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)
5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3) G25. Permit Shield

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

a. Such applicable requirements are included and are specifically identified in the permit; or b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof. 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

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

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

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

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

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

#### G26. Severability

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

#### G27. Property Rights

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

#### G28. Transferability

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

#### G29. Disclaimer

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

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

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

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-9526

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)

#### G31. Prevention of Air Pollution Emergency Episodes

The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

#### G32. Contacts List

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

Iowa Compliance Officer Air Branch Enforcement and Compliance Assurance Division U.S. EPA Region 7 11201 Renner Blvd. Lenexa, KS 66219 (913) 551-7020 The current address and phone number for reports and notifications to the department or the Director is: Chief, Air Quality Bureau Iowa Department of Natural Resources Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-8200

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

#### Field Office 1

909 West Main – Suite 4 Manchester, IA 52057 (563) 927-2640

#### Field Office 3 1900 N. Grand Ave.

Spencer, IA 51301 (712) 262-4177

#### Field Office 5

Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-0268

#### Polk County Public Works Dept.

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

# Field Office 2

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

#### Field Office 4

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

#### Field Office 6

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

#### **Linn County Public Health**

Air Quality Branch 501 13th St., NW Cedar Rapids, IA 52405 (319) 892-6000

# V. Appendix A

40 CFR 60 Subpart A – General Provisions https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr60 main 02.tpl

40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d\_0b

40 CFR 60 Subpart DD – Standards of Performance for Grain Elevators <u>https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.dd</u>

40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels <u>https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.k\_0b</u>

40 CFR 60 Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry <u>https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.vv\_0a</u>

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines <u>https://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.iiii</u>

40 CFR 63 Subpart A - National Emission Standards for Hazardous Air Pollutants for Source Categories – General Provisions https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40cfr63\_main\_02.tpl

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) <u>https://www.ecfr.gov/cgi-bin/text-</u> idx?c=ecfr;rgn=div6;view=text;node=40%3A14.0.1.1.1.1;idno=40;sid=e94dcfde4a04b27290c44

5a56e635e58;cc=ecfr