Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: ADM Corn Processing - Clinton
Facility Location: 1251 Beaver Channel Parkway
Clinton, IA 52732
Air Quality Operating Permit Number: 06-TV-007
Expiration Date: December 4, 2011

EIQ Number: 92-0265
Facility File Number: 23-01-006

Responsible Official
Name: James Woll
Title: Plant Manager
Mailing Address: 1251 Beaver Channel Parkway, Clinton, IA 52732
Phone #: (563) 241-1121

Permit Contact Person for the Facility
Name: Rob Wilbur
Title: Environmental Manager
Mailing Address: 1251 Beaver Channel Parkway, Clinton, IA 52732
Phone #: (563) 244-5223

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

Douglas A. Campbell, Supervisor of Air Operating Permits Section Date
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Abbreviations

acfm............................actual cubic feet per minute
CFR ............................Code of Federal Regulation
CE ..............................control equipment
CEM ...........................continuous emission monitor
°F ..............................degrees Fahrenheit
EIQ .............................emissions inventory questionnaire
EP ..............................emission point
EU ..............................emission unit
gr./dscf ........................grains per dry standard cubic foot
gr./100 cf .......................grains per one hundred cubic feet
HCl ............................Hydrogen Chloride
IAC ............................Iowa Administrative Code
IDNR .........................Iowa Department of Natural Resources
MVAC ........................motor vehicle air conditioner
NAICS .........................North American Industry Classification System
NSPS ............................new source performance standard
ppmv ..........................parts per million by volume
lb./hr ...........................pounds per hour
lb./MMBtu .....................pounds per million British thermal units
SCC ............................Source Classification Codes
scfm ............................standard cubic feet per minute
SIC ............................Standard Industrial Classification
TPY ............................tons per year
USEPA ........................United States Environmental Protection Agency
VOL ............................Volatile Organic Liquid

Pollutants
PM .............................particulate matter
PM$_{10}$ ........................particulate matter ten microns or less in diameter
SO$_2$ ...........................sulfur dioxide
NO$_x$ ...........................nitrogen oxides
VOC ...........................volatile organic compound
CO .............................carbon monoxide
HAP ............................hazardous air pollutant
I. Facility Description and Equipment List

Facility Name: ADM Corn Processing - Clinton

Facility Description: Wet Corn Milling (SIC 2046)

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*These emission units are part of the Gluten Process Group.*
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* Applicable Requirements for these emission units are included in the Feed Process Group.
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<td>Aspirated Bulk Loading Spout #1</td>
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### Insignificant Activities Equipment List

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<tr>
<td>INSIG MAINT</td>
<td>Maintenance Aerosols</td>
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<tr>
<td>WASHERS</td>
<td>Parts Washers (6)</td>
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<td>WELD</td>
<td>Metal Cutting and Welding</td>
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<tr>
<td>EU36-24B</td>
<td>Oil Refining Boiler (6 MMBtu/hr)*</td>
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</table>

* This boiler is subject to 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to 40 CFR 63.7506(c), existing small gaseous fueled boilers are not subject to the initial notification requirements in 63.9(b) and are not subject to any requirements in Subparts DDDDD or A of 40 CFR 63.
II. Plant-Wide Conditions

Facility Name: ADM Corn Processing - Clinton
Permit Number:

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

Permit Duration

The term of this permit is: Five (5) years from permit issuance
Commencing on:
Ending on:

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

Emission Limits

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

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

Sulfur Dioxide (SO$_2$): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

Particulate Matter (state enforceable only)$^1$:
No person shall cause or allow the emission of particulate matter from any source in excess of the emission standards specified in this chapter, except as provided in 567 – Chapter 24. For sources constructed, modified or reconstructed after July 21, 1999, the emission of particulate matter from any process shall not exceed an emission standard of 0.1 grain per dry standard cubic foot of exhaust gas, except as provided in 567 – 21.2(455B), 23.1(455B), 23.4(455B) and 567 – Chapter 24.
For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B).
Authority for Requirement: 567 IAC 23.3(2)"a" (as revised 7/21/1999)

$^1$ Pending approval into Iowa's State Implementation Plan (SIP), paragraph 567 IAC 23.3(2)"a" (as revised 7/21/1999) is considered state enforceable only.
Particulate Matter:
The emission of particulate matter from any process shall not exceed the amount determined from Table I, except as provided in 567 — 21.2(455B), 23.1(455B), 23.4(455B) and 567 — Chapter 24. If the director determines that a process complying with the emission rates specified in Table I is causing or will cause air pollution in a specific area of the state, an emission standard of 0.1 grain per standard cubic foot of exhaust gas may be imposed.
Authority for Requirement: 567 IAC 23.3(2)"a" (prior to 7/21/1999)

Fugitive Dust: Attainment and Unclassified Areas - No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved public roads, without taking reasonable precautions to prevent particulate matter in quantities sufficient to create a nuisance, as defined in Iowa Code section 657.1, from becoming airborne. 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 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 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, fertilizers 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.
Authority for Requirement: 567 IAC 23.3(2)"c"

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2 Paragraph 567 IAC 23.3(2)"a" (prior to 7/21/1999) is the general particulate matter emission standard currently in the Iowa SIP.
Facility Wide Limits

Process throughput:
1. The facility shall not grind more than 138.7 million bushels of corn per rolling 12-month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Record monthly the amount of corn that is ground at the facility in bushels. Calculated and record 12-month rolling totals.
Authority for Requirement: Iowa DNR Construction Permits 06-A-033 through 06-A-050

Compliance Plan
The owner/operator shall comply with the Applicable Requirements listed below. The compliance status is based on information provided by the applicant.

Unless otherwise noted in Section III of this permit, ADM Corn Processing - Clinton is in compliance with all Applicable Requirements and shall continue to comply with all such requirements. For those Applicable Requirements which become effective during the permit term, ADM Corn Processing - Clinton shall comply with such requirements in a timely manner.
Authority for Requirement: 567 IAC 22.108(15)

Consent Decree

Archer Daniels Midland Company (ADM) has entered into a Consent Decree with the United States EPA and 14 state and local air programs in order to resolve a number of alleged violations at its 43 facilities located in 16 states. Four of the facilities affected by this Consent Decree are located within the state of Iowa. These affected facilities are located in Cedar Rapids, Clinton, Des Moines, and Keokuk. ADM shall comply with the requirements of the Consent Decree that apply to this facility.

A copy of this Consent Decree may be obtained on the internet at following address:
http://www.epa.gov/compliance/resources/decrees/civil/can/admcod.pdf

Authority for Requirement: Consent Decree C.D. IL, #03-CV-2066
567 IAC 22.108(1)
III. Emission Point-Specific Conditions

Facility Name: ADM Corn Processing - Clinton
Permit Number:

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
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<td>219-1</td>
<td>EU219-1</td>
<td>F-1 Still</td>
<td>95-A-236-S</td>
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<td>39-3</td>
<td>EU39-3</td>
<td>A-6 Feed Tank</td>
<td>96-A-004-S1</td>
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<td>39-4</td>
<td>EU39-4</td>
<td>A-8 Feed Tank</td>
<td>96-A-006-S1</td>
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<td>43-1</td>
<td>EU43-1</td>
<td>MR-4 Stillage Evaporator</td>
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<td>43-2</td>
<td>EU43-2</td>
<td>Stillage Tank #3</td>
<td>02-A-810-S2</td>
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<td>53-1</td>
<td>EU53-1</td>
<td>R-1 Stripping Column</td>
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<td>EU58-1A</td>
<td>111 Fermenter</td>
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<td>EU58-1C</td>
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### Alcohol Process Equipment List (cont.)

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### Alcohol Process Equipment List (cont.)

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<tr>
<td>YRD-F2</td>
<td>EUYRD-F2</td>
<td>Ethanol Truck Loadout</td>
<td>NA</td>
</tr>
<tr>
<td>YRD-L3</td>
<td>EUYRD-L3</td>
<td>Ethanol Rail Loadout – Fuels and Beverage</td>
<td>05-A-510</td>
</tr>
<tr>
<td>YRD-L4</td>
<td>EUYRD-F4</td>
<td>Ethanol Barge Loadout</td>
<td>05-A-511</td>
</tr>
<tr>
<td>YRD-F5</td>
<td>EUYRD-F5</td>
<td>Lower End Ethanol Truck Loadout</td>
<td>05-A-513</td>
</tr>
<tr>
<td>YRD-L6</td>
<td>EUYRD-L6</td>
<td>Lower End Ethanol Rail Loadout</td>
<td>05-A-512</td>
</tr>
</tbody>
</table>

**NSPS:**

Many pieces of equipment associated with this process group are subject to 40 CFR Part 60 Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry. Please refer to Appendix B for the text of this Subpart. A list of the equipment that is affected by this Subpart shall be readily accessible and made available to DNR staff upon request.
Emission Point ID Number: 219-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU219-1</td>
<td>F-1 Still</td>
<td>CE219-1: Scrubber</td>
<td>190 Proof Alcohol</td>
<td>13,200 gallons/hr</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 2.22 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 95-A-236-S

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

Stack Height, (ft, from the ground): 124
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): 85
Exhaust Temperature (°F): 115
Authority for Requirement: Iowa DNR Construction Permit 95-A-236-S

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes [ ] No [x]
Facility Maintained Operation & Maintenance Plan Required? Yes [ ] No [x]
Compliance Assurance Monitoring (CAM) Plan Required? Yes [ ] No [x]

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 Numbers: 39-3 & 39-4

#### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>39-3</td>
<td>EU39-3</td>
<td>A-6 Feed Tank</td>
<td>NA</td>
<td>Ethanol</td>
<td>85,000 gallons</td>
<td>96-A-004-S1</td>
</tr>
<tr>
<td>39-4</td>
<td>EU39-4</td>
<td>A-8 Feed Tank</td>
<td>NA</td>
<td>Ethanol</td>
<td>85,000 gallons</td>
<td>96-A-006-S1</td>
</tr>
</tbody>
</table>

#### 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.

There are no applicable emission limits for these emission units at this time.

**Operational Limits & Requirements**

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

Process throughput:

1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record Keeping:

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

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 96-A-004-S1 & 96-A-006-S1

**Emission Point Characteristics**

*Each emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 69
- Stack Opening, (inches, dia.): 6
- Exhaust Flow Rate (scfm): 50
- Exhaust Temperature (°F): 90
- Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permits 96-A-004-S1 & 96-A-006-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)


Emission Point ID Number: 43-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU43-1</td>
<td>MR-4 Stillage Evaporator</td>
<td>CE43-1: Scrubber</td>
<td>Stillage</td>
<td>72,000 gallons/hr</td>
</tr>
<tr>
<td>EU43-2</td>
<td>Stillage Tank #3</td>
<td></td>
<td>Stillage</td>
<td>220,000 gallons</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.0 lb/hr.(1), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 02-A-810-S2
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 0.33 lb/hr.(1)
Authority for Requirement: Iowa DNR Construction Permit 02-A-810-S2

(1) Standard is expressed as the average of 3 runs.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Control equipment parameters:
1. The liquid flow rate to the scrubber shall be maintained between the minimum value observed during the compliance test and 15 gallons per minute.
2. The pressure drop across the scrubber shall be maintained between the minimum value observed during the compliance test and 4" water column.
3. The pH of the liquid feed to the scrubber shall be maintained above the minimum value observed during the compliance test.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A record of the minimum liquid flow rate, pH, and pressure drop observed during the compliance test.
2. The flow rate, pH, and pressure drop for the scrubber (CE 43-1) shall be maintained continuously.
3. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
7. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
8. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 02-A-810-S2

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

Stack Height, (ft, from the ground): 109
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 400
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 02-A-810-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements

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

Stack Testing Completed:
  Pollutant – Sulfur Dioxide (SO₂)
  Stack Test Completed – November 23, 2004
  Result Emission Rate – 0.0018 lb/hr.
  Test Method – 40 CFR 60, Appendix A, Method 6C
  Authority for Requirement – Iowa DNR Construction Permit 02-A-810-S2

  Pollutant – VOC's
  Stack Test Completed – November 3, 2005
  Result Emission Rate – 0.192 lb/hr.
  Test Method – Iowa DNR Approved Method
  Authority for Requirement – Iowa DNR Construction Permit 02-A-810-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 ☐

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: 53-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU53-1</td>
<td>R-1 Stripping Column</td>
<td>CE53-1: Scrubber</td>
<td>Ethanol</td>
<td>27,000 gallons/hr</td>
</tr>
</tbody>
</table>

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: VOC's  
Emission Limit(s): 0.86 lb/hr. 
Authority for Requirement: Iowa DNR Construction Permit 96-A-485-S1

(1) Standard is expressed as the average of 3 runs.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-485-S1

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

Stack Height, (ft, from the ground): 54
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (acfm): 50
Exhaust Temperature (°F): 100

Authority for Requirement: Iowa DNR Construction Permit 96-A-485-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing:
Pollutant – VOC's
Stack Test to be Completed by – Within sixty (60) after achieving maximum production rate and no later than 180 days after the initial start-up.
Test Method – Iowa DNR Approved Method*
Authority for Requirement – Iowa DNR Construction Permit 96-A-485-S1

* Test Run Time = 1 hour
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required?  Yes ☑ No ☐

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

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: 58-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Tank Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU58-1A</td>
<td>111 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1B</td>
<td>112 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1C</td>
<td>113 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1D</td>
<td>114 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1E</td>
<td>115 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1F</td>
<td>116 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>500,000 gallons</td>
</tr>
<tr>
<td>EU58-1G</td>
<td>117 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>750,000 gallons</td>
</tr>
<tr>
<td>EU58-1H</td>
<td>118 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>750,000 gallons</td>
</tr>
<tr>
<td>EU58-1I</td>
<td>119 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>750,000 gallons</td>
</tr>
<tr>
<td>EU58-1J</td>
<td>120 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>750,000 gallons</td>
</tr>
<tr>
<td>EU58-1K</td>
<td>121 Fermenter</td>
<td></td>
<td>Starch, Steepwater, Yeast</td>
<td>1,300,000 gallons</td>
</tr>
</tbody>
</table>

CE58-1: Scrubber

CE58-2: Scrubber

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 50.27 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 95-A-234-S4
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 54
Stack Opening, (feet, dia.): 1.3
Exhaust Flow Rate (scfm): 15,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 95-A-234-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for CE58-1, and 58-2)

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: 58-6

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU58-6</td>
<td>CO₂ Dryer Vent</td>
<td>NA</td>
<td>CO₂</td>
<td>8.3 tons/hr.</td>
</tr>
</tbody>
</table>

**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: VOC's
Emission Limit(s): 3.44 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 96-A-724

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

Stack Height, (ft, from the ground): 47
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 400
Exhaust Temperature (°F): Variable
Authority for Requirement: Iowa DNR Construction Permit 96-A-724

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes [ ] No [x]
Facility Maintained Operation & Maintenance Plan Required? Yes [ ] No [x]
Compliance Assurance Monitoring (CAM) Plan Required? Yes [ ] No [x]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  58-8

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU58-8</td>
<td>Carbon Column Separator</td>
<td>NA</td>
<td>CO₂</td>
<td>8.3 tons/hr</td>
</tr>
</tbody>
</table>

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:** VOC's
- **Emission Limit(s):** 7.90 tons/yr
- **Authority for Requirement:** Iowa DNR Construction Permit 96-A-723

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

- **Stack Height, (ft, from the ground):** 45
- **Stack Opening, (inches, dia.):** 8
- **Exhaust Flow Rate (scfm):** 400
- **Exhaust Temperature (°F):** Variable
- **Authority for Requirement:** Iowa DNR Construction Permit 96-A-723

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 61-6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU61-6</td>
<td>Anhydrous Column #2</td>
<td>CE61-6: Scrubber</td>
<td>190 Proof Alcohol</td>
<td>15,000 gallons/hr.</td>
</tr>
<tr>
<td>EU64-5</td>
<td>Anhydrous Column #1</td>
<td>CE64-5: Scrubber</td>
<td>190 Proof Alcohol</td>
<td>12,000 gallons/hr.</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 2.84 lb/hr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 93-A-372-S3

\(^{(1)}\) Standard is expressed as the average of 3 runs.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 93-A-372-S3

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 143
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 600
Exhaust Temperature (°F): 100
Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 93-A-372-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements

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

Stack Testing:
Pollutant – VOC’s
Stack Test to be Completed by (date) – within sixty (60) days after achieving maximum production rate and no later than 180 days after the initial start-up date.
Test Method – Iowa DNR Approved Method*
Authority for Requirement – Iowa DNR Construction Permit 93-A-372-S3

* Test Run Time = 1 hour

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

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

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: 64-12

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU64-6</td>
<td>B1/B2 Beer Stills</td>
<td>CE64-6: Scrubber</td>
<td>Feed</td>
<td>2,592,000 gallons/day</td>
</tr>
<tr>
<td>EU64-12</td>
<td>C1/C2 Beer Stills</td>
<td>CE64-12: Scrubber</td>
<td>Feed</td>
<td>2,880,000 gallons/day</td>
</tr>
<tr>
<td>EU39-1</td>
<td>D Beer/Beverage Still</td>
<td>CE64-6: Scrubber</td>
<td>Feed</td>
<td>4,320,000 gallons/day</td>
</tr>
<tr>
<td>EU39-2</td>
<td>A8 &amp; A9 Beverage Columns</td>
<td>CE39-2: Scrubber</td>
<td>Feed</td>
<td>288,000 gallons/day</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emmission Limit(s): 1.81 lb/hr.⁽¹⁾, 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 95-A-505-S2
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emmission Limit(s): 3.72lb/hr.⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 95-A-505-S2

⁽¹⁾ Standard is expressed as the average of 3 runs.

**Operational Limits & Requirements**

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-505-S2

**Emission Point Characteristics**

*Each emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 143
- Stack Opening, (inches, dia.): 6
- Exhaust Flow Rate (scfm): 170
- Exhaust Temperature (°F): 100
- Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 95-A-505-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Stack Testing:**
Pollutant – VOC's
Stack Test to be Completed by (date) – within sixty (60) days after achieving maximum production rate and no later than 180 days after the initial start-up date.
Test Method – Iowa DNR Approved Method*
Authority for Requirement – Iowa DNR Construction Permit 93-A-372-S3

* Test Run Time = 1 hour

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

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

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☐ No ☑
(Required for CE64-6 and CE64-12)

**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: 71-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU71-1</td>
<td>A-1 Beer Still</td>
<td>NA</td>
<td>190 Proof Alcohol</td>
<td>18,000 gallons/hr.</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 9.2 tons/yr.(1)
Authority for Requirement: Iowa DNR Construction Permit 93-A-086-S2

(1) Standard is a 12-month rolling total.

**Operational Limits & Requirements**

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

Process throughput:
1. The A1 Feed Tank, EU 71-1, shall not process more than 40,320,000 gallons per 12-month rolling total.

Reporting & Record keeping:

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

1. Record monthly, the amount of material processed through the A1 Feed Tank, EU 71-1. Calculate and record 12-month rolling totals.

Authority for Requirement: Iowa DNR Construction Permit 93-A-086-S2
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 149  
Stack Opening, (inches, dia.): 2  
Exhaust Flow Rate (scfm): 18  
Exhaust Temperature (°F): 80  
Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 93-A-086-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 71A-1, 72-2, 72-3, 72-5, 72-6, 72-7, 72-8, 72-9, 72-10, 72-13

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>71A-1</td>
<td>EU71A-1</td>
<td>Caustic Stripper</td>
<td>NA</td>
<td>Ethanol</td>
<td>12,500 gallons/hr. feed</td>
</tr>
<tr>
<td>72-2</td>
<td>EU72-2</td>
<td>Fructose Alcohol Tank #2</td>
<td></td>
<td>Potable Alcohol</td>
<td>12,500 gallons</td>
</tr>
<tr>
<td>72-3</td>
<td>EU72-3</td>
<td>Enzyme Tank</td>
<td></td>
<td>Enzyme</td>
<td>12,500 gallons</td>
</tr>
<tr>
<td>72-5</td>
<td>EU72-5</td>
<td>Gin Scale Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>20,000 gallons/hr.</td>
</tr>
<tr>
<td>72-6</td>
<td>EU72-6</td>
<td>Alcohol Scale Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>22,000 gallons</td>
</tr>
<tr>
<td>72-7</td>
<td>EU72-7</td>
<td>Fructose Alcohol Tank #1</td>
<td></td>
<td>Potable Alcohol</td>
<td>12,500 gallons</td>
</tr>
<tr>
<td>72-8</td>
<td>EU72-8</td>
<td>Greens Tank #1</td>
<td></td>
<td>Potable Alcohol</td>
<td>12,800 gallons</td>
</tr>
<tr>
<td>72-9</td>
<td>EU72-9</td>
<td>R1 Stripper Tank</td>
<td></td>
<td>Ethyl Alcohol</td>
<td>2000 gallons</td>
</tr>
<tr>
<td>72-10</td>
<td>EU72-10</td>
<td>R1 Stripper Tank 32</td>
<td></td>
<td>Ethyl Alcohol</td>
<td>2000 gallons/hr.</td>
</tr>
<tr>
<td>72-13</td>
<td>EU72-13</td>
<td>Antifoam Tank</td>
<td></td>
<td>Antifoam</td>
<td>12,500 gallons</td>
</tr>
</tbody>
</table>

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 for these emission points at this time.

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

Agency Approved Operation & Maintenance Plan Required?  Yes □  No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes □  No ☒

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  72-11

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU72-11</td>
<td>A-4A Finishing Column</td>
<td>NA</td>
<td>190 Proof Alcohol</td>
<td>4166 gallons/hr.</td>
</tr>
</tbody>
</table>

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:  VOC's
Emission Limit(s):  0.95 tons/yr.
Authority for Requirement:  Iowa DNR Construction Permit 95-A-245-S1

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

Stack Height, (ft, from the ground):  88
Stack Opening, (inches, dia.):  3
Exhaust Flow Rate  (scfm):  71
Exhaust Temperature  (°F):  80
Authority for Requirement:  Iowa DNR Construction Permit 95-A-245-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: 73-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU73-2</td>
<td>Yeast Propagators</td>
<td>CE73-2: Demister</td>
<td>Yeast/Enzyme</td>
<td>7200 gallons/hr.</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 1.85 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 95-A-239-S1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 53
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 400
Exhaust Temperature (°F): 90
Authority for Requirement: Iowa DNR Construction Permit 95-A-239-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 73-5

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU73-5</td>
<td>Mix Tank</td>
<td>NA</td>
<td>Starch/Steepwater/Stillage/UFC</td>
<td>210,000 gallons</td>
</tr>
</tbody>
</table>

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 for this emission point at this time.

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 73-9

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU73-9</td>
<td>Soda Ash Storage (Fermenter 106)</td>
<td>CE73-9: Scrubber</td>
<td>Soda Ash</td>
<td>1550 lbs/hr.</td>
</tr>
</tbody>
</table>

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: PM-10
Emission Limit(s): 0.51 lb/hr, 2.23 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 95-A-238

Pollutant: Particulate Matter
Emission Limit(s): 0.58 lb/hr., 2.55 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 95-A-238

Operational Limits & Requirements

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

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. The owner/operator must keep readily accessible records showing the dimensions of the storage vessel and the capacity.
Authority for Requirement: Iowa DNR Construction Permit 95-A-238
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 51  
Stack Opening, (inches, dia.): 14  
Exhaust Flow Rate (scfm): 680  
Exhaust Temperature (°F): 140  
Authority for Requirement: Iowa DNR Construction Permit 95-A-238

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 73-11, 73-12, 73-15, 73-16, 73-17, 73-19, 73-20, 73-22, 77-3, 77-6, 77-9, 77-10, 77-11, 77-12

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>73-11</td>
<td>EU73-11</td>
<td>Stillage Tank #1</td>
<td></td>
<td>Stillage</td>
<td>80,000 gallons</td>
</tr>
<tr>
<td>73-12</td>
<td>EU73-12</td>
<td>Stillage Tank #2</td>
<td></td>
<td>Stillage</td>
<td>80,000 gallons</td>
</tr>
<tr>
<td>73-15</td>
<td>EU73-15</td>
<td>109 Fermenter</td>
<td></td>
<td>Starch/Light Steepwater/Yeast/UFC</td>
<td>204,000 gallons</td>
</tr>
<tr>
<td>73-16</td>
<td>EU73-16</td>
<td>107 Fermenter</td>
<td></td>
<td>Starch/Light Steepwater/Yeast/UFC</td>
<td>204,000 gallons</td>
</tr>
<tr>
<td>73-17</td>
<td>EU73-17</td>
<td>105 Fermenter</td>
<td></td>
<td>Starch/Light Steepwater/Yeast/UFC</td>
<td>204,000 gallons</td>
</tr>
<tr>
<td>73-19</td>
<td>EU73-19</td>
<td>103 Fermenter</td>
<td></td>
<td>Starch/Light Steepwater/Yeast/UFC</td>
<td>204,000 gallons</td>
</tr>
<tr>
<td>73-20</td>
<td>EU73-20</td>
<td>101 Fermenter</td>
<td></td>
<td>Starch/Light Steepwater/Yeast/UFC</td>
<td>204,000 gallons</td>
</tr>
<tr>
<td>73-22</td>
<td>EU73-22</td>
<td>Beer Well</td>
<td></td>
<td>Beer/Ethanol</td>
<td>83,000 gallons</td>
</tr>
<tr>
<td>77-6</td>
<td>EU77-6</td>
<td>RGSG-1 Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>15,000 gallons</td>
</tr>
<tr>
<td>77-9</td>
<td>EU77-9</td>
<td>RGSG-2 Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>15,000 gallons</td>
</tr>
<tr>
<td>77-10</td>
<td>EU77-10</td>
<td>GHT-1 Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>1200 gallons/hr.</td>
</tr>
<tr>
<td>77-11</td>
<td>EU77-11</td>
<td>GHT-2 Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>1200 gallons/hr.</td>
</tr>
<tr>
<td>77-12</td>
<td>EU77-12</td>
<td>GHT-3 Tank</td>
<td></td>
<td>Potable Alcohol</td>
<td>1200 gallons/hr.</td>
</tr>
</tbody>
</table>

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 for these emission points.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 77-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU77-2</td>
<td>Gin Stills 1 &amp; 2</td>
<td>NA</td>
<td>Ethanol</td>
<td>8,000 gallons (each)</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 0.84 lb/hr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-508

\(^{(1)}\) Standard is expressed as the average of 3 runs.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 05-A-508

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

Stack Height, (ft, from the ground): 48  
Stack Opening, (inches, dia.): 4  
Exhaust Flow Rate (scfm): 5  
Exhaust Temperature (°F): 92  
Discharge Style: Vertical Obstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-508

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:
Pollutant – VOC's
Stack Test to be Completed – Within sixty (60) days from achieving maximum production rate and no later than 180 days after the initial start-up.
Test Method – Iowa DNR Approved Method*
Authority for Requirement – Iowa DNR Construction Permit 05-A-508

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 78-8

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU78-8</td>
<td>MR3-Stillage Evaporator</td>
<td>NA</td>
<td>Stillage</td>
<td>36,000 gallons/hr. feed</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 3.44 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 96-A-722

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 96-A-722
567 IAC 23.3(3)"e"

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

Stack Height, (ft, from the ground): 26
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (acfm): 47
Exhaust Temperature (°F): 120
Authority for Requirement: Iowa DNR Construction Permit 96-A-722

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 78-9 & 78-10

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>78-9</td>
<td>EU78-9</td>
<td>MR-2 Stillage Evaporator</td>
<td>NA</td>
<td>Stillage</td>
<td>36,000 gallons/hr. feed</td>
</tr>
<tr>
<td>78-10</td>
<td>EU78-10</td>
<td>MR-1 Stillage Evaporator</td>
<td>NA</td>
<td>Stillage</td>
<td>36,000 gallons/hr. feed</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO2)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-17

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-17</td>
<td>RGS-112 Tank</td>
<td>NA</td>
<td>Beverage Alcohol</td>
<td>125,000 gallons</td>
</tr>
</tbody>
</table>

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 for this emission unit at this time.

**Operational Limits & Requirements**

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

Process throughput:

1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:

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

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-005-S1
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 51  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 90  
Discharge Style: Obstructed Vertical  
Authority for Requirement: Iowa DNR Construction Permit 96-A-005-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?**

Yes ☐ No ☒

**Compliance Assurance Monitoring (CAM) Plan Required?**

Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-18

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-18</td>
<td>RGS-113 Tank Internal Floating Roof Beverage Alcohol</td>
<td>125,000 gallons</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 for this emission unit at this time.

Operational Limits & Requirements

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:

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

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-005-S1
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground):  51  
Stack Opening, (inches, dia.):  8  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F):  90  
Discharge Style: Obstructed Vertical  
Authority for Requirement: Iowa DNR Construction Permit 96-A-483-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-19

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-19</td>
<td>RGS-114 Tank</td>
<td>NA</td>
<td>Beverage Alcohol</td>
<td>125,000 gallons</td>
</tr>
</tbody>
</table>

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 for this emission unit at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-484-S1
Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 51
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Obstructed Vertical
Authority for Requirement: Iowa DNR Construction Permit 96-A-484-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

Agency Approved Operation & Maintenance Plan Required? Yes [x] No [ ]
Facility Maintained Operation & Maintenance Plan Required? Yes [x] No [ ]
Compliance Assurance Monitoring (CAM) Plan Required? Yes [x] No [ ]

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Numbers:** YRD-20, YRD-21, YRD-22, YRD-23

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-20</td>
<td>EUYRD-20</td>
<td>GS-3 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>30,000 gallons</td>
<td>95-A-225-S2</td>
</tr>
<tr>
<td>YRD-21</td>
<td>EUYRD-21</td>
<td>RGS-111 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>30,700 gallons</td>
<td>95-A-229-S1</td>
</tr>
<tr>
<td>YRD-22</td>
<td>EUYRD-22</td>
<td>RGS-110 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>30,700 gallons</td>
<td>95-A-228-S1</td>
</tr>
<tr>
<td>YRD-23</td>
<td>EUYRD-23</td>
<td>RGS-109 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>30,700 gallons</td>
<td>95-A-227-S1</td>
</tr>
</tbody>
</table>

**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.*

There are no applicable emission limits for these emission units at this time.

**Operational Limits & Requirements**

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

Process throughput:

1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.


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

- Stack Height, (ft, from the ground): 34
- Stack Opening, (inches, dia.): 4
- Exhaust Flow Rate (scfm): Displacement
- Exhaust Temperature (°F): 90
- Discharge Style: Obstructed Vertical


The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Numbers:** YRD-24, YRD-25

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-24</td>
<td>EUYRD-24</td>
<td>Fusel Oil Tank 2</td>
<td>NA</td>
<td>Fusel Oil</td>
<td>8225 gallons</td>
</tr>
<tr>
<td>YRD-25</td>
<td>EUYRD-25</td>
<td>Fusel Oil Tank 1</td>
<td>NA</td>
<td>Fusel Oil</td>
<td>8225 gallons</td>
</tr>
</tbody>
</table>

**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 for these emission units at this time.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-26 & YRD-27

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-26</td>
<td>EUYRD-26</td>
<td>190-2 Tank</td>
<td>NA</td>
<td>190/200 Proof Alcohol</td>
<td>30,000 gallons</td>
<td>95-A-231-S1</td>
</tr>
<tr>
<td>YRD-27</td>
<td>EUYRD-27</td>
<td>190-1 Tank</td>
<td>NA</td>
<td>190 Proof Alcohol</td>
<td>30,000 gallons</td>
<td>95-A-230-S1</td>
</tr>
</tbody>
</table>

**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.

There are no applicable emission limits for these emission units at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 95-A-231-S1 & 95-A-230-S1
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 34
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Obstructed Vertical
Authority for Requirement: Iowa DNR Construction Permits 95-A-231-S1 & 95-A-230-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-28, YRD-29, YRD-30, YRD-33

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-28</td>
<td>EUYRD-28</td>
<td>RGS-101 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>24,825 gallons</td>
</tr>
<tr>
<td>YRD-29</td>
<td>EUYRD-29</td>
<td>RGS-102 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>24,825 gallons</td>
</tr>
<tr>
<td>YRD-30</td>
<td>EUYRD-30</td>
<td>GS-2 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>28,800 gallons</td>
</tr>
<tr>
<td>YRD-33</td>
<td>EUYRD-33</td>
<td>GS-1 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>25,000 gallons</td>
</tr>
</tbody>
</table>

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 for these emission points at this time.

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

Agency Approved Operation & Maintenance Plan Required? Yes □ No ☒

Facility Maintained Operation & Maintenance Plan Required? Yes □ No ☒

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-34 & YRD-35

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-34</td>
<td>EUYRD-34</td>
<td>200-2 Tank</td>
<td>NA</td>
<td>200 Proof Alcohol</td>
<td>210,000 gallons</td>
<td>95-A-233-S1</td>
</tr>
<tr>
<td>YRD-35</td>
<td>EUYRD-35</td>
<td>200-1 Tank</td>
<td>NA</td>
<td>200 Proof Alcohol</td>
<td>210,000 gallons</td>
<td>95-A-232-S1</td>
</tr>
</tbody>
</table>

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 for these emission points at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permits 95-A-233-S1 & 95-A-232-S1
**Emission Point Characteristics**

*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 46  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 90  
Discharge Style: Obstructed Vertical  
Authority for Requirement: Iowa DNR Construction Permits 95-A-233-S1 & 95-A-232-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

Agency Approved Operation & Maintenance Plan Required?  Yes ☑  No ☒  
Facility Maintained Operation & Maintenance Plan Required?  Yes ☑  No ☒  
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☑  No ☒  
Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Numbers: YRD-36 & YRD-38**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-36</td>
<td>EUYRD-36</td>
<td>AS-101 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>300,000 gallons</td>
</tr>
<tr>
<td>YRD-38</td>
<td>EUYRD-38</td>
<td>AS-103 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>300,000 gallons</td>
</tr>
</tbody>
</table>

**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 Requirements for these emission points at this time.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-37

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-37</td>
<td>F1 Fructose Still Feed Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>300,000 gallons</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: VOC's
Emission Limit(s): 3.12 tons/yr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-316

\(^{(1)}\) Standard is a 12-month rolling total.

Operational Limits & Requirements

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

Process throughput:

1. Crystalline fructose production shall not exceed 69,000 tons per rolling twelve (12) month period.
2. Ethanol used for crystalline fructose production shall not exceed 50,000,000 gallons per rolling twelve (12) month period.
3. Mother Liquor used for crystalline fructose production shall not exceed 80,000,000 gallons per rolling twelve (12) month period.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. For the first twelve (12) months of operation, determine the cumulative amount of crystalline fructose produced for each month of operation.
2. After the first twelve (12) months of operation, determine the total amount of crystalline fructose produced on a rolling-12-month basis for each month of operation.
3. For the first twelve (12) months of operation, determine the cumulative amount of alcohol used for crystalline fructose production for each month of operation.
4. After the first twelve (12) months of operation, determine the total amount alcohol used for crystalline fructose production on a rolling-12-month basis for each month of operation.
5. For the first twelve (12) months of operation, determine the cumulative amount of mother liquor used for crystalline fructose production for each month of operation.
6. After the first twelve (12) months of operation, determine the total amount alcohol used for mother liquor production on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 04-A-316

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

Stack Height, (ft, from the ground): 34
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate  (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Unobstructed Vertical

Authority for Requirement: Iowa DNR Construction Permit 04-A-316

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-39

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-39</td>
<td>AS-104 Tank</td>
<td>NA</td>
<td>Potable Alcohol</td>
<td>300,000 gallons</td>
</tr>
</tbody>
</table>

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 for this emission unit at this time.

**Operational Limits & Requirements**

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

Process throughput:

1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:

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

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-226-S1
Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 42
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Obstructed Vertical
Authority for Requirement: Iowa DNR Construction Permit 95-A-226-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  YRD-40, YRD-41, YRD-42

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-40</td>
<td>EUYD-40</td>
<td>CDA-1 Tank</td>
<td>CEYRD-40:</td>
<td>Denatured Alcohol</td>
<td>4,060,000 gallons</td>
<td>93-A-368-S3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal Floating Roof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YRD-41</td>
<td>EUYRD-41</td>
<td>CDA-2 Tank</td>
<td>CEYRD-41:</td>
<td>Denatured Alcohol</td>
<td>4,060,000 gallons</td>
<td>93-A-369-S3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal Floating Roof</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>YRD-42</td>
<td>EUYRD-42</td>
<td>CDA-3 Tank</td>
<td>CEYRD-42:</td>
<td>Denatured Alcohol</td>
<td>4,060,000 gallons</td>
<td>93-A-370-S3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Internal Floating Roof</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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 for these emission units at this time.

Operational Limits & Requirements

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.


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

Stack Height, (ft, from the ground): 50
Stack Opening, (inches, dia.): *
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Horizontal


* These tanks are each equipped with four (4) 36" W x 9" H rectangular overflow openings, spaced evenly around the circumference of the tank at the top of the straight wall. The Tank is also equipped with eight (8) 17" W x 25" L air scoop openings in the roof spaced evenly around the outside diameter on the roof.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-43 & YRD-44

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-43</td>
<td>EUYRD-43</td>
<td>GAS-1 Tank</td>
<td>CEYRD-43: Internal Floating Roof</td>
<td>Natural Gas</td>
<td>36,000 gallons</td>
<td>95-A-247-S2</td>
</tr>
<tr>
<td>YRD-44</td>
<td>EUYRD-44</td>
<td>GAS-2 Tank</td>
<td>CEYRD-44: Internal Floating Roof</td>
<td>Natural Gas</td>
<td>36,000 gallons</td>
<td>95-A-248-S3</td>
</tr>
</tbody>
</table>

**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.

There are no applicable emission limits for these emission units at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.
NSPS 40 CFR Part 60 Subpart Kb:  
New Source Performance Standards for Volatile Organic Compounds [40 CFR § 60.112b(a)(1)]

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer’s recommended setting.

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

Compliance Testing and Procedure Requirements [40 CFR § 60.113b(a)]

(a) Visually inspect the internal floating roof, the primary seal, and the secondary seal prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
(b) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

(c) Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seal (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspections as specified in paragraph (b) of this section.

(d) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by (a) and (c) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (c) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Administrator at least 7 days prior to the refilling.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
The owner or operator of each vessel shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

567 IAC 23.1(2)"ddd"
40 CFR Part 60 Subpart Kb
Emission Point Characteristics
Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 24
Stack Opening, (inches, dia.): *
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 90
Discharge Style: Horizontal
* These tanks are each equipped with four (4) 17" W x 25" L air scoop openings in the roof spaced evenly around the outside diameter on the roof.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-45

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-45</td>
<td>Inhibitor-1 Tank</td>
<td>NA</td>
<td>Inhibitor</td>
<td>10,000 gallons</td>
</tr>
</tbody>
</table>

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 for this emission point at this time.

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

Process Throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-252-S3
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 18  
Stack Opening, (inches, dia.): 3  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 130  
Discharge Style: Obstructed Vertical  
Authority for Requirement: Iowa DNR Construction Permit 95-A-252-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: YRD-46**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-46</td>
<td>AS-107 Tank</td>
<td>NA</td>
<td>Beverage Ethanol</td>
<td>1,000,000 gallons</td>
</tr>
</tbody>
</table>

**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 for this emission unit at this time.

**Operational Limits & Requirements**

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

**Process throughput:**

1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

**Reporting & Record keeping:**

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

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 95-A-504-S1
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 54  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 90  
Discharge Style: Downward  
Authority for Requirement: Iowa DNR Construction Permit 95-A-504-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑  
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑  
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☑  
Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-47

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-47</td>
<td>AS-108 Tank</td>
<td>NA</td>
<td>Beverage Ethanol</td>
<td>1,000,000 gallons</td>
</tr>
</tbody>
</table>

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: VOC's
Emission Limit(s): 25.3 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 96-A-482

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 96-A-482-S1
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 54  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): Displacement  
Exhaust Temperature (°F): 90  
Discharge Style: Downward  
Authority for Requirement: Iowa DNR Construction Permit 96-A-482-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-L2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-L2</td>
<td>Ethanol Truck Loadout</td>
<td>NA</td>
<td>Ethyl Alcohol</td>
<td>36,000 gallons/hr.</td>
</tr>
</tbody>
</table>

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 associated with this emission point at this time.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-L3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-L3</td>
<td>Ethanol Rail Loadout – Fuels and Beverage</td>
<td>NA</td>
<td>Ethanol</td>
<td>500,000 gallons/day</td>
</tr>
</tbody>
</table>

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 for this emission unit at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
4. No more than 190 million gallons of ethanol (200° equivalent) shall be loaded from this emission unit per rolling twelve (12) month period.
5. Fuel alcohol shall be loaded via submerged fill.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.
7. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) loaded by this emission unit for each month of operation.
8. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) loaded by this emission unit on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 05-A-510

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- **Exhaust Flow Rate** (scfm): 130
- **Exhaust Temperature** (°F): 90

Authority for Requirement: Iowa DNR Construction Permit 05-A-510

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-L4, YRD-L5, YRD-L6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-L4</td>
<td>EUYRD-L4</td>
<td>Ethanol Barge Loadout</td>
<td>NA</td>
<td>Ethanol</td>
<td>1,100,000 gall/day</td>
<td>05-A-511</td>
</tr>
<tr>
<td>YRD-L5</td>
<td>EUYRD-L5</td>
<td>Lower End Ethanol Truck Loadout</td>
<td>NA</td>
<td>Ethanol</td>
<td>800,000 gall/day</td>
<td>05-A-513</td>
</tr>
<tr>
<td>YRD-L6</td>
<td>EUYRD-L6</td>
<td>Lower End Ethanol Rail Loadout</td>
<td>NA</td>
<td>Ethanol</td>
<td>175,000 gall/day</td>
<td>05-A-512</td>
</tr>
</tbody>
</table>

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 for these emission units at this time.

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

Process throughput:
1. The facility shall be limited to 237.3 million gallons of ethanol (200° equivalent) per rolling twelve (12) month period.
2. The facility shall be limited to 54.8 million gallons of beverage alcohol (200° equivalent) per rolling twelve (12) month period.
3. The facility shall be limited to 1.8 million gallons of gin (200° equivalent) per rolling twelve (12) month period.
4. No more than 190 million gallons of ethanol (200° equivalent) shall be loaded from each emission unit per rolling twelve (12) month period.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.

1. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) produced by the facility for each month of operation.
2. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
3. During the first twelve (12) months of operation determine the total amount of beverage alcohol (200° equivalent) produced by the facility for each month of operation.
4. After the first twelve (12) months of operation determine the annual amount of beverage alcohol (200° equivalent) produced on a rolling-12-month basis for each month of operation.
5. During the first twelve (12) months of operation determine the total amount of gin (200° equivalent) produced by the facility for each month of operation.
6. After the first twelve (12) months of operation determine the annual amount of gin (200° equivalent) produced on a rolling-12-month basis for each month of operation.
7. During the first twelve (12) months of operation determine the total amount of ethanol (200° equivalent) loaded by this emission unit for each month of operation.
8. After the first twelve (12) months of operation determine the annual amount of ethanol (200° equivalent) loaded by each emission unit on a rolling-12-month basis for each month of operation.


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

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Exhaust Flow Rate (scfm)</th>
<th>Exhaust Temperature (°F)</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-L4</td>
<td>180</td>
<td>90</td>
<td>05-A-511</td>
</tr>
<tr>
<td>YRD-F5</td>
<td>25</td>
<td>90</td>
<td>05-A-513</td>
</tr>
<tr>
<td>YRD-L6</td>
<td>35</td>
<td>90</td>
<td>05-A-512</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
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
## Enzyme Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>206-3</td>
<td>EU206-3</td>
<td>Steepwater Tank</td>
<td>04-A-1077</td>
</tr>
<tr>
<td>31-3</td>
<td>EU31-3A</td>
<td>Bentonite Silo No. 1</td>
<td>94-A-416</td>
</tr>
<tr>
<td></td>
<td>EU31-3B</td>
<td>Bentonite Silo No. 2</td>
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</tr>
<tr>
<td>31-4</td>
<td>EU31-4A</td>
<td>Filter Aid Silo #1</td>
<td>94-A-318</td>
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<tr>
<td></td>
<td>EU31-4B</td>
<td>Filter Aid Silo #1</td>
<td></td>
</tr>
<tr>
<td>31-5</td>
<td>EU31-5</td>
<td>Enzyme Bulk Storage Silo No. 1</td>
<td>94-A-417</td>
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<tr>
<td>31-6</td>
<td>EU31-6</td>
<td>Enzyme Bulk Storage Silo No. 2</td>
<td>94-A-418</td>
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<td>31-7</td>
<td>EU31-7</td>
<td>Enzyme Bulk Storage Silo No. 3</td>
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<td>31-9</td>
<td>EU31-9</td>
<td>Enzyme Bulk Storage Silo No. 4</td>
<td>94-A-420</td>
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<td>31-10</td>
<td>EU31-10</td>
<td>Enzyme Bulk Storage Silo No. 5</td>
<td>94-A-421</td>
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<tr>
<td>74-1</td>
<td>EU74-1A</td>
<td>Enzyme Fermenters (F1-F28)</td>
<td>05-A-599</td>
</tr>
<tr>
<td>74-2</td>
<td>EU74-1B</td>
<td>Enzyme Tank #112</td>
<td>05-A-600</td>
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<td>EU74-1C</td>
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<td>EU74-1D</td>
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<td>Enzyme Seed Fermenter S1</td>
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<td>EU74-1Y</td>
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<tr>
<td>EYRD-1</td>
<td>EUEYRD-1</td>
<td>Steepwater Tank #151</td>
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<tr>
<td>EYRD-2</td>
<td>EUEYRD-2</td>
<td>Steepwater Tank #152</td>
<td>04-A-1079</td>
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</table>
Emission Point ID Number: 206-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
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<tbody>
<tr>
<td>EU206-3</td>
<td>Steepwater Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td>5500 gallons</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 04-A-1077
567 IAC 23.3(3)"e"

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

Stack Height, (ft, from the ground): 80
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 7
Exhaust Temperature (°F): 130
Discharge Style: Horizontal
Authority for Requirement: Iowa DNR Construction Permit 04-A-1077

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 31-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU31-3A</td>
<td>Bentonite Silo #1</td>
<td>CE31-3: Baghouse</td>
<td>Bentonite</td>
<td>15,000 gallons</td>
</tr>
<tr>
<td>EU31-3B</td>
<td>Bentonite Silo #2</td>
<td></td>
<td>Bentonite</td>
<td>15,000 gallons</td>
</tr>
</tbody>
</table>

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): 5 %
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-416
  - 567 IAC 23.3(2)"d"

- **Pollutant:** PM-10
  - Emission Limit(s): 0.02 gr./dscf, 0.12 lb/hr., 0.53 tons/yr.
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-416

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below:

- Stack Height, (ft, from the ground): 69
- Stack Opening, (inches.): 8 x 12
- Exhaust Flow Rate (scfm): 700
- Exhaust Temperature (°F): 70
- Authority for Requirement: Iowa DNR Construction Permit 94-A-416

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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:  31-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU31-4A</td>
<td>Filter Aid Silo #1</td>
<td>CE31-4: Baghouse</td>
<td>Filter Aid</td>
<td>15,000 gallons</td>
</tr>
<tr>
<td>EU31-4B</td>
<td>Filter Aid Silo #2</td>
<td></td>
<td>Filter Aid</td>
<td>15,000 gallons</td>
</tr>
</tbody>
</table>

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):  5 %
Authority for Requirement: Iowa DNR Construction Permit 94-A-318
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s):  0.02 gr./dscf, 0.12 lb/hr., 0.53 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-318

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

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

Stack Height, (ft, from the ground):  69
Stack Opening, (inches.):  8 x 12
Exhaust Flow Rate (scfm):  700
Exhaust Temperature (°F):  70
Authority for Requirement: Iowa DNR Construction Permit 94-A-318

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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 Numbers: 31-5, 31-6, 31-7, 31-9, 31-10

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-5</td>
<td>EU31-5</td>
<td>Enzyme Bulk Storage Silo #1</td>
<td>CE31-5: Bin Vent Filter</td>
<td>Enzyme</td>
<td>92 cubic feet</td>
<td>94-A-417</td>
</tr>
<tr>
<td>31-6</td>
<td>EU31-6</td>
<td>Enzyme Bulk Storage Silo #2</td>
<td>CE31-6: Bin Vent Filter</td>
<td>Enzyme</td>
<td>92 cubic feet</td>
<td>94-A-418</td>
</tr>
<tr>
<td>31-7</td>
<td>EU31-7</td>
<td>Enzyme Bulk Storage Silo #3</td>
<td>CE31-7: Bin Vent Filter</td>
<td>Enzyme</td>
<td>92 cubic feet</td>
<td>94-A-419</td>
</tr>
<tr>
<td>31-9</td>
<td>EU31-9</td>
<td>Enzyme Bulk Storage Silo #4</td>
<td>CE31-9: Bin Vent Filter</td>
<td>Enzyme</td>
<td>92 cubic feet</td>
<td>94-A-420</td>
</tr>
<tr>
<td>31-10</td>
<td>EU31-10</td>
<td>Enzyme Bulk Storage Silo #5</td>
<td>CE31-10: Bin Vent Filter</td>
<td>Enzyme</td>
<td>92 cubic feet</td>
<td>94-A-421</td>
</tr>
</tbody>
</table>

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): 5 %
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.02 gr./dscf, 0.12 lb/hr., 0.53 tons/yr.

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

*Each emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 69
- Stack Opening, (inches): 12 x 24
- Exhaust Flow Rate (scfm): 700
- Exhaust Temperature (°F): 70

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Opacity**

The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.
Stack Testing:
Pollutant – PM-10
Stack Test to be Completed – If any emission unit operates more than 500 hours in any 12-month rolling period, that unit shall be tested within 60 days.
Test Method – 40 CFR 51, Appendix M, 201A with 202*
Authority for Requirement - 567 IAC 22.108(3)
* Or approved alternative.

Pollutant – Particulate Matter
Stack Test to be Completed – If any emission unit operates more than 500 hours in any 12-month rolling period, that unit shall be tested within 60 days.
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

According to the Department's Periodic Monitoring Guidance Document, emission points 31-5, 31-6, 31-7, 31-9, and 31-10 are subject to stack testing for Particulate Matter and PM-10. The facility may choose to perform one stack test for Particulate Matter on one of the five emission points, depending on the availability, to demonstrate compliance with Particulate Matter and PM-10 limits for all five emission points. However, if the results of the representative stack testing exceed the Particulate Matter emission limits, then all five emission points shall be considered out of compliance with their Particulate Matter and PM-10 emission limits.

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

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

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for CE31-5, CE31-6, CE31-7, CE31-9, CE31-10)

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 Numbers: 74-1 & 74-2

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU74-1A</td>
<td>Enzyme Fermenters (F1-F27)</td>
<td></td>
<td>Enzyme</td>
<td>See Table Below</td>
</tr>
<tr>
<td>EU74-1B</td>
<td>Enzyme Tank #112</td>
<td></td>
<td>Enzyme</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU74-1C</td>
<td>Enzyme Tank #113</td>
<td></td>
<td>Enzyme</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU74-1D</td>
<td>Enzyme Tank #114</td>
<td></td>
<td>Enzyme</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU74-1E</td>
<td>Enzyme Tank #115</td>
<td></td>
<td>Enzyme</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU74-1F</td>
<td>Enzyme Tank #116</td>
<td></td>
<td>Enzyme</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU74-1G</td>
<td>Enzyme Tank #117</td>
<td></td>
<td>Enzyme</td>
<td>65,000 gallons</td>
</tr>
<tr>
<td>EU74-1H</td>
<td>Enzyme Tank #118</td>
<td></td>
<td>Enzyme</td>
<td>65,000 gallons</td>
</tr>
<tr>
<td>EU74-1I</td>
<td>Enzyme Tank #321</td>
<td></td>
<td>Enzyme</td>
<td>65,000 gallons</td>
</tr>
<tr>
<td>EU74-1J</td>
<td>Enzyme Tank #322</td>
<td></td>
<td>Enzyme</td>
<td>65,000 gallons</td>
</tr>
<tr>
<td>EU74-1K</td>
<td>Enzyme Tank #323</td>
<td></td>
<td>Enzyme</td>
<td>65,000 gallons</td>
</tr>
<tr>
<td>EU74-1L</td>
<td>Enzyme Tank #221</td>
<td></td>
<td>Enzyme</td>
<td>12,000 gallons</td>
</tr>
<tr>
<td>EU74-1M</td>
<td>Enzyme Seed Fermenter S1</td>
<td>CE74-1: Scrubber</td>
<td>Enzyme Solution</td>
<td>1500 gallons</td>
</tr>
<tr>
<td>EU74-1N</td>
<td>Enzyme Seed Fermenter S2</td>
<td></td>
<td>Enzyme Solution</td>
<td>1500 gallons</td>
</tr>
<tr>
<td>EU74-1O</td>
<td>Enzyme Seed Fermenter S3</td>
<td></td>
<td>Enzyme Solution</td>
<td>400 gallons</td>
</tr>
<tr>
<td>EU74-1P</td>
<td>Enzyme Seed Fermenter S4</td>
<td></td>
<td>Enzyme Solution</td>
<td>400 gallons</td>
</tr>
<tr>
<td>EU74-1Q</td>
<td>Enzyme Seed Fermenter S5</td>
<td></td>
<td>Enzyme Solution</td>
<td>1500 gallons</td>
</tr>
<tr>
<td>EU74-1R</td>
<td>Enzyme Seed Fermenter S6</td>
<td></td>
<td>Enzyme Solution</td>
<td>1500 gallons</td>
</tr>
<tr>
<td>EU74-1S</td>
<td>Enzyme Seed Fermenter S7</td>
<td></td>
<td>Enzyme Solution</td>
<td>2500 gallons</td>
</tr>
<tr>
<td>EU74-1T</td>
<td>Enzyme Seed Fermenter S8</td>
<td></td>
<td>Enzyme Solution</td>
<td>2500 gallons</td>
</tr>
<tr>
<td>EU74-1U</td>
<td>Enzyme Seed Fermenter S9</td>
<td></td>
<td>Enzyme Solution</td>
<td>2500 gallons</td>
</tr>
<tr>
<td>EU74-1V</td>
<td>Enzyme Seed Fermenter S10</td>
<td></td>
<td>Enzyme Solution</td>
<td>2500 gallons</td>
</tr>
<tr>
<td>EU74-1W</td>
<td>Enzyme Seed Fermenter S11</td>
<td></td>
<td>Enzyme Solution</td>
<td>1200 gallons</td>
</tr>
<tr>
<td>EU74-1X</td>
<td>Enzyme Seed Fermenter S12</td>
<td></td>
<td>Enzyme Solution</td>
<td>1200 gallons</td>
</tr>
<tr>
<td>EU74-1Y</td>
<td>Enzyme Seed Fermenter S13</td>
<td></td>
<td>Enzyme Solution</td>
<td>1200 gallons</td>
</tr>
</tbody>
</table>

Enzyme Process
Permit 06-TV-007: 12/5/2006
### 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):** 40 %<sup>(1)</sup>  
**Authority for Requirement:** Iowa DNR Construction Permits 05-A-599 and 05-A-600  
567 IAC 23.3(2)"d"

**Pollutant:** VOC's  
**Emission Limit(s):** 8.38 lb/hr.<sup>(2)</sup>  
**Authority for Requirement:** Iowa DNR Construction Permit 05-A-599 and 05-A-600  
567 IAC 23.3(2)"a"

<sup>(1)</sup> Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing)

<sup>(2)</sup> Standard is expressed as the average of 3 runs

**Operational Limits & Requirements**

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

**Control equipment parameters:**

1. The control equipment shall be inspected and maintained according to manufacturer’s specifications.
2. The facility shall determine the appropriate limits on scrubinant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

**Reporting & Record keeping:**

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

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubinant flow rate and pressure drop for the scrubbers.

**Authority for Requirement:** Iowa DNR Construction Permit 05-A-599 and 05-A-600

---

<table>
<thead>
<tr>
<th>Fermenters</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1-F4</td>
<td>9050 gallons</td>
</tr>
<tr>
<td>F5-F8</td>
<td>11,500 gallons</td>
</tr>
<tr>
<td>F9-F14</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>F15-F23</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>F24-F28</td>
<td>30,000 gallons</td>
</tr>
</tbody>
</table>
**Emission Point Characteristics**  
*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 67  
Stack Opening, (inches): 60 x 72  
Exhaust Flow Rate (acfm): 37,350  
Exhaust Temperature (°F): 100  
Discharge Style: Horizontal

Authority for Requirement: Iowa DNR Construction Permits 05-A-599 and 05-A-600

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed:** Completed for EP's 74-1 and 74-2

- Pollutant – VOC’s
  - Stack Test Completed – January 17, 2006
  - Outlet VOC’s – 0.53 lb/hr. (each)
  - Test Method – Iowa DNR Approved Method
  - Authority for Requirement – Iowa DNR Construction Permits 05-A-599 and 05-A-600

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

**Facility Maintained Operation & Maintenance Plan Required?**  
Yes ☐ No ❏  
(Required for CE74-1 and CE74-2)

**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 Numbers: EYRD-1 & EYRD2

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EYRD-1</td>
<td>EUEYRD-1</td>
<td>Steepwater Tank #151</td>
<td>NA</td>
<td>Steepwater</td>
<td>18,000 gallons</td>
<td>04-A-1078</td>
</tr>
<tr>
<td>EYRD-2</td>
<td>EUEYRD-2</td>
<td>Steepwater Tank #152</td>
<td>NA</td>
<td>Steepwater</td>
<td>18,000 gallons</td>
<td>04-A-1079</td>
</tr>
</tbody>
</table>

**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: Sulfur Dioxide (SO$_2$)
Emission Limit(s): 500 ppmv
567 IAC 23.3(3)"e"

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

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 7
Exhaust Temperature (°F): 130
Discharge Style: Downward

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)
### Feed Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-17</td>
<td>EU14-64A</td>
<td>No. 1 Leader Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-64B</td>
<td>No. 2 Leader Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-64C</td>
<td>No. 3 Leader Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-64D</td>
<td>No. 4 Leader Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-65A</td>
<td>No. 1 Stearns Rogers Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-66A</td>
<td>No. 1 Vetter Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-66B</td>
<td>No. 2 Vetter Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-66C</td>
<td>No. 3 Vetter Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-66D</td>
<td>No. 4 Vetter Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-66E</td>
<td>No. 5 Vetter Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-67</td>
<td>No. 1 Fluid Bed Germ Dryer</td>
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</tr>
<tr>
<td></td>
<td>EU14-68</td>
<td>No. 2 Fluid Bed Germ Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU15-3</td>
<td>Wet Feed Silo</td>
<td></td>
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<tr>
<td></td>
<td>EU17-61</td>
<td>No. 5 Gluten Intensa Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU17-62</td>
<td>No. 6 Gluten Intensa Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU4-40</td>
<td>No. 1 Gluten Intansa Dryer</td>
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<tr>
<td>B-25</td>
<td>EU25-70</td>
<td>No. 2 Stearns Rogers Dryer</td>
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<td>EU25-71</td>
<td>No. 3 Stearns Rogers Dryer</td>
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<td>EU25-72</td>
<td>Carbon Furnace No. 3</td>
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<td>EU226-2</td>
<td>Carbon Furnace No. 2</td>
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<td>EU24-4</td>
<td>Carbon Furnace No. 4</td>
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<tr>
<td>B-56</td>
<td>EU11-20</td>
<td>No. 1 Pellet Cooler</td>
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<td>EU11-21</td>
<td>No. 2 Pellet Cooler</td>
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<td>EU11-22</td>
<td>No. 3 Pellet Cooler</td>
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<td>EU11-23</td>
<td>No. 4 Pellet Cooler</td>
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<td>EU11-24</td>
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<td>EU202-X9</td>
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<td>11-17</td>
<td>EU11-17</td>
<td>Clay Transport</td>
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<tr>
<td>17-X6</td>
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<td>Building 17 - Varnip-Feed Press Process Area</td>
<td>NA</td>
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<tr>
<td>14-1</td>
<td>EU14-12A</td>
<td>No. 1 Sharple</td>
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<td>EU14-12B</td>
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<tr>
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<td>EU14-12C</td>
<td>No. 3 Sharple</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU14-12D</td>
<td>No. 4 Sharple</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EUB-14</td>
<td>Gluten Feed Dewatering</td>
<td></td>
</tr>
</tbody>
</table>

1 These emission units are part of the Gluten Process Group.
2 These emission units are part of the Refinery Process Group.
### Feed Process Equipment List (cont.)

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
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</thead>
<tbody>
<tr>
<td>216-55</td>
<td>EU216-55</td>
<td>Vetter Drying Cooling Drum</td>
<td>81-A-053-S1</td>
</tr>
<tr>
<td>38-15</td>
<td>EU38-15</td>
<td>Feed Silo No. 1</td>
<td>72-A-189-S1</td>
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<td>38-16</td>
<td>EU38-16</td>
<td>Feed Silo No. 2</td>
<td>03-A-1271</td>
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<td>38-17</td>
<td>EU38-17</td>
<td>Feed Silo No. 3</td>
<td>72-A-187</td>
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<td>38-63</td>
<td>EU38-1</td>
<td>Pellet Loadout – Rail</td>
<td>94-A-303-S2</td>
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<td>EU38-2</td>
<td>Pellet/Gluten Loadout – Truck</td>
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<td>EU38-3</td>
<td>Gluten Loadout - Rail</td>
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<td>38-F2</td>
<td>EU38-F2</td>
<td>Feed Loadout (Non-Captured)</td>
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<td>4-39</td>
<td>EUB-4</td>
<td>Building – Feed Dewatering</td>
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<td>4-41</td>
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<td>Feed Bulk Loadout</td>
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<td>57-F1</td>
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<td>Feed Manufacture - Fugitive Emission</td>
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<td>57-F2</td>
<td>EU57-F2</td>
<td>Feed Manufacture - Fugitive Emission</td>
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<td>81-37</td>
<td>EUB-81</td>
<td>Building 81 – Gluten Filters</td>
<td>90-A-073</td>
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<td>92-31</td>
<td>EUB-92</td>
<td>Building 92 – Gluten Filters</td>
<td>90-A-072</td>
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<td>92-36</td>
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</table>
**Emission Point ID Number: B-17**

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU14-64A</td>
<td>No. 1 Leader Dryer</td>
<td>CE14-64A: Rotoclone CE14-64E: Wet Scrubber</td>
<td>Corn Germ</td>
<td>240,000 bushels/day</td>
</tr>
<tr>
<td>EU14-64B</td>
<td>No. 2 Leader Dryer</td>
<td>CE14-64B: Rotoclone CE14-64E: Wet Scrubber</td>
<td>Corn Germ</td>
<td>240,000 bushels/day</td>
</tr>
<tr>
<td>EU14-64C</td>
<td>No. 3 Leader Dryer</td>
<td>CE14-64C: Rotoclone CE14-64E: Wet Scrubber</td>
<td>Corn Germ</td>
<td>240,000 bushels/day</td>
</tr>
<tr>
<td>EU14-64D</td>
<td>No. 4 Leader Dryer</td>
<td>CE14-64D: Rotoclone CE14-64E: Wet Scrubber</td>
<td>Corn Germ</td>
<td>240,000 bushels/day</td>
</tr>
<tr>
<td>EU14-65A</td>
<td>No. 1 Stearns Dryer</td>
<td>CE14-65A: Venturi Scrubber CE14-65B: Demister</td>
<td>Corn Fiber, Germ Meal, Steepwater/ Natural Gas</td>
<td>275,000 bushels/day/ 0.138 mcm/hr.</td>
</tr>
<tr>
<td>EU14-66A</td>
<td>No. 1 Vetter Dryer</td>
<td>CE14-66A: Rotoclone Wet Scrubber CE14-66F: Gas Scrubber</td>
<td>Corn Fiber, Germ Meal, Steepwater</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-66B</td>
<td>No. 2 Vetter Dryer</td>
<td>CE14-66B: Rotoclone Wet Scrubber CE14-66F: Gas Scrubber</td>
<td>Corn Fiber, Germ Meal, Steepwater</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-66C</td>
<td>No. 3 Vetter Dryer</td>
<td>CE14-66C: Rotoclone Wet Scrubber CE14-66F: Gas Scrubber</td>
<td>Corn Fiber, Germ Meal, Steepwater</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-66D</td>
<td>No. 4 Vetter Dryer</td>
<td>CE14-66D: Rotoclone Wet Scrubber CE14-66F: Gas Scrubber</td>
<td>Corn Fiber, Germ Meal, Steepwater</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-66E</td>
<td>No. 5 Vetter Dryer</td>
<td>CE14-66E: Rotoclone Wet Scrubber CE14-66F: Gas Scrubber</td>
<td>Corn Fiber, Germ Meal, Steepwater</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-67</td>
<td>No. 1 Fluid Bed Germ Dryer</td>
<td>CE14-67A: Demister CE14-67B: Wet Scrubber</td>
<td>Corn Germ</td>
<td>180,000 bushels/day</td>
</tr>
<tr>
<td>EU14-68</td>
<td>No. 2 Fluid Bed Germ Dryer</td>
<td>CE14-68A: Demister CE14-68B: Wet Scrubber</td>
<td>Corn Germ</td>
<td>240,000 bushels/day</td>
</tr>
<tr>
<td>EU15-3</td>
<td>Wet Feed Silo</td>
<td>CE15-3: Scrubber</td>
<td>Feed</td>
<td>480,200 lbs.</td>
</tr>
<tr>
<td>EU17-61</td>
<td>No. 5 Gluten Intensa Dryer*</td>
<td>CE17-61A: Wet Scrubber CE17-61B: Gas Scrubber</td>
<td>Gluten Natural Gas</td>
<td>180,000 bushels/day 60 MMBtu/hr</td>
</tr>
<tr>
<td>EU17-62</td>
<td>No. 6 Gluten Intensa Dryer*</td>
<td>CE17-62A: Wet Scrubber CE17-62B: Gas Scrubber</td>
<td>Gluten Natural Gas</td>
<td>180,000 bushels/day 60 MMBtu/hr</td>
</tr>
<tr>
<td>EU4-40</td>
<td>No. 1 Gluten Intensa Dryer*</td>
<td>CE4-40A: Wet Scrubber CE4-40B: Gas Scrubber</td>
<td>Gluten Natural Gas</td>
<td>108,000 bushels/day 38 MMBtu/hr.</td>
</tr>
</tbody>
</table>

* These emission units are part of the Gluten Process Group.
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.

Total Emissions from the stack:

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 66.98 lb/hr.\(^{(2)}\), 0.0188 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 63.00 lb/hr.\(^{(2)}\), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO\(_x\))
Emission Limit(s): 28.00 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3

Pollutant: VOC's
Emission Limit(s): 208.70 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 277.83 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3

Emissions from EU15-3:

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 2.2 lb/hr.\(^{(2)}\), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3
567 IAC 23.3(3)"e"

\(^{(1)}\) An exceedance of the indicator opacity of (5%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Operational Limits & Requirements**

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

**EU’s 14-64 A-D, & 14-66 A-E**

Control equipment parameters:
1. The pressure drop across the scrubbers connected to these units shall be maintained as follows;
   1. CE14-64E – 3 to 7 inches of water.
   2. CE14-66F – 0 to 3 inches of water

Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. The flow rate of liquid fed to the scrubbers shall be recorded daily.
2. The pH of the liquid fed to the scrubbers shall be recorded daily.
3. The pressure drop across scrubbers shall be recorded continuously.

Authority for Requirement: 567 IAC 22.108(3)

**Stack**

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.
2. The facility shall determine the appropriate limits on scrubtant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubtant flow rate and pressure drop for the scrubbers.
3. At the end of each month, the total amount of feed that was put through the wet feed silo (EU 15-3) over the previous month shall be recorded.

Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 200  
Stack Opening, (inches, dia.): 180  
Exhaust Flow Rate (scfm): 399,000  
Exhaust Temperature (°F): 130  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-593-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed:**
- **Pollutant – PM-10**  
  Stack Test Completed on – 11/25/03  
  Test Method – Iowa Compliance Sampling Manual Method 5  
  Result Concentration – 0.008 gr/scf  
  Result Emission Rate – 21.01 lb/hr.  
  Authority for Requirement – Iowa DNR Construction Permit 94-A-593-S2

- **EU15-3 only**  
  Pollutant – SO₂  
  Stack Test Completed on – 11/26/03  
  Test Method – 40 CFR 60, Appendix A, Method 6C  
  Result Concentration – 6 ppmv  
  Result Emission Rate – 0.38 lb/hr.  
  Authority for Requirement – Iowa DNR Construction Permit 94-A-593-S2

- **EU’s 14-64A – 14-64D**  
  Pollutant – SO₂  
  Stack Test Completed on – 7/28/05  
  Test Method – 40 CFR 60, Appendix A, Method 6C  
  Result Concentration – 1.78 ppmv  
  Authority for Requirement – Consent Decree C.D. IL, #03-CV-2066
EU's 14-66A – 46-66E
Pollutant – SO₂
Stack Test Completed on – 8/2/05
Test Method – 40 CFR 60, Appendix A, Method 6C
Result Concentration – 11.2 ppmv
Authority for Requirement – Consent Decree C.D. IL, #03-CV-2066

Stack Testing Required (Stack):
Pollutant – VOC's*
Stack Test to be Completed – Within 60 days after the Sterns-Roger and Intensa dryers are removed, and completed before the replacement units are installed.
Test Method – Iowa DNR Approved Method
Authority for Requirement – Iowa DNR Construction Permit 94-A-593-S3

*Test Run Time = 1 hour
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing.  567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required?  Yes ☑ No ☐
(Required for all pieces of Control Equipment associated with B-17)
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: B-25*
* Additional emission units are associated with this emission point. Please see the Refinery Process group for these units.

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU25-70</td>
<td>No. 2 Stearns Rogers Dryer</td>
<td>CE25-70A: Venturi Scrubber CE25-70B: Cooling Scrubber</td>
<td>Corn Fiber, Heavy Steepwater/Natural Gas</td>
<td>115 tons/hr./0.138 mmcf/hr.</td>
</tr>
<tr>
<td>EU25-71</td>
<td>No. 3 Stearns Rogers Dryer</td>
<td>CE25-71A: Venturi Scrubber CE25-71B: Cooling Scrubber</td>
<td>Corn Fiber, Heavy Steepwater/Natural Gas</td>
<td>115 tons/hr./0.102 mmcf/hr.</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Opacity</th>
<th>PM-10</th>
<th>Particulate Matter</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>VOC</th>
<th>CO</th>
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</thead>
<tbody>
<tr>
<td>Stack Total</td>
<td>5%</td>
<td>23.37 tons/yr. 0.1 gr/scf</td>
<td>41.9 lb/hr. 183.52 tons/yr. 500 ppmv</td>
<td>42.35 lb/hr. 185.55 tons/yr.</td>
<td>NA</td>
<td>145.7 lb/hr. 638.24 tons/yr.</td>
<td></td>
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<tr>
<td>EU25-70</td>
<td>NA</td>
<td>0.012 gr/scf</td>
<td>0.1 gr/scf</td>
<td>9.0 lb/hr. 39.42 tons/yr. 500 ppmv</td>
<td>12.0 lb/hr. 52.56 tons/yr.</td>
<td>NA</td>
<td>35.68 lb/hr. 156.28 tons/yr.</td>
</tr>
<tr>
<td>EU25-71</td>
<td>NA</td>
<td>NA</td>
<td>0.1 gr/scf</td>
<td>9.0 lb/hr. 39.42 tons/yr. 500 ppmv</td>
<td>13.7 lb/hr. 60.01 tons/yr.</td>
<td>NA</td>
<td>51.85 lb/hr. 227.1 tons/yr.</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 94-A-594-S7
567 IAC 23.3(2)"d"
567 IAC 23.3(2)"a"
567 IAC 23.3(3)"e"
**Emission Point Characteristics**
The emission point shall conform to the specifications listed below:

Stack Height, (ft, from the ground): 200  
Stack Opening, (inches, dia.): 96  
Exhaust Flow Rate (scfm): 120,000  
Exhaust Temperature (°F): 160  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-594-S7

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed: EU25-72**
Pollutant – SO₂  
Stack Test Completed on – 7/27/05  
Test Method – 40 CFR 60, Appendix A, Method 6C  
Result Concentration – 0.330 ppmv  
Authority for Requirement – Consent Decree C.D. IL, #03-CV-2066

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑  
(Required for all pieces of Control Equipment associated with B-25)

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: B-56

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU11-20</td>
<td>No. 1 Pellet Cooler</td>
<td>CE11-20A: Cyclone</td>
<td>Animal Feed</td>
<td>30 tons/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CE11-20B: Cyclone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU11-21</td>
<td>No. 2 Pellet Cooler</td>
<td>CE11-21A: Cyclone</td>
<td>Animal Feed</td>
<td>30 tons/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CE11-21B: Cyclone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU11-22</td>
<td>No. 3 Pellet Cooler</td>
<td>CE11-22A: Cyclone</td>
<td>Animal Feed</td>
<td>30 tons/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CE11-22B: Cyclone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU11-23</td>
<td>No. 4 Pellet Cooler</td>
<td>CE11-23A: Cyclone</td>
<td>Animal Feed</td>
<td>105 tons/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CE11-23B: Cyclone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU11-24</td>
<td>No. 5 Pellet Cooler</td>
<td>CE11-24A: Cyclone</td>
<td>Animal Feed</td>
<td>30 tons/hr.</td>
</tr>
<tr>
<td>EU202-X9</td>
<td>No. 6 Pellet Cooler</td>
<td>CE202X-9A: Cyclone</td>
<td>Animal Feed</td>
<td>30 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

- **Pollutant:** Opacity
  - Emission Limit(s): 40 %\(^{(1)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-422-S1
    - 567 IAC 23.3(2)d

- **Pollutant:** PM-10
  - Emission Limit(s): 11.34 lb/hr.\(^{(2)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-422-S1

- **Pollutant:** Particulate Matter
  - Emission Limit(s): 11.34 lb/hr.\(^{(2)}\), 0.1 gr/dscf
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-422-S1
    - 567 IAC 23.4(7)

- **Pollutant:** VOC's
  - Emission Limit(s): 15.06 lb/hr.\(^{(2)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-422-S1

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Operational Limits & Requirements**

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

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.

Reporting & Record keeping:

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

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

Authority for Requirement: Iowa DNR Construction Permit 94-A-422-S1

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

- Stack Height, (ft, from the ground): 200
- Stack Opening, (inches, dia.): 117
- Exhaust Flow Rate (scfm): 200,000
- Exhaust Temperature (°F): 110

Authority for Requirement: Iowa DNR Construction Permits 94-A-422-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing Completed:**

- Pollutant – VOC’s\(^{(2)}\)
- Stack Test Completed on – April 20, 2006
- Result Emission Rate – 6.6 lb/hr.
- Test Method – Iowa DNR Approved Method
- Authority for Requirement – Iowa DNR Construction Permit 94-A-422

**Stack Testing:**

- Pollutant – PM-10
- Stack test to be Completed by – December 5, 2008
- Test Method – 40 CFR 51, Appendix M, 201A with 202\(^{(1)}\)
- Authority for Requirement - 567 IAC 22.108(3)
Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

(1) Or approved alternative
(2) Test Run Time = 1 hour

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for all associated control equipment)

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: 11-17

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU11-17</td>
<td>Clay Transport</td>
<td>CE11-17: Baghouse</td>
<td>Clay</td>
<td>22.5 tons/hr.</td>
</tr>
</tbody>
</table>

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

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: 17-X6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU17-X6</td>
<td>Building 17 - Varnip-Feed Press Process Area</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 14-1, 14-2, 14-3, 14-X1, 14-X2, 14-X3, 14-X4, 14-X5

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-14</td>
<td>Building 14 – Feed Dewatering</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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**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: Sulfur Dioxide (SO₂)

Emission Limit(s): 500 ppmv

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

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 14-12

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU14-12A</td>
<td>No. 1 Sharple Germ</td>
<td>NA</td>
<td>Germ</td>
<td>20.83 tons/hr.</td>
</tr>
<tr>
<td>EU14-12B</td>
<td>No. 2 Sharple Germ</td>
<td>NA</td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU14-12C</td>
<td>No. 3 Sharple Germ</td>
<td>NA</td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU14-12D</td>
<td>No. 4 Sharple Germ</td>
<td>NA</td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-598
567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 0.46 lb/hr.\(^{(2)}\), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 05-A-598
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 0.16 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-598

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 55  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (acfm): 100  
Exhaust Temperature (°F): 90  
Discharge Style: Downward  
Authority for Requirement: Iowa DNR Construction Permit 05-A-598

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: 216-55

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
</table>

**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:  
Iowa DNR Construction 81-A-053-S1  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 1.26 lb/hr.

Authority for Requirement:  
Iowa DNR Construction Permit 81-A-053-S1

Pollutant: Particulate Matter  
Emission Limit(s): 1.26 lb/hr., 0.1 gr/dscf

Authority for Requirement:  
Iowa DNR Construction Permit 81-A-053-S1  
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)  
Emission Limit(s): 0.536 lb/hr., 500 ppmv

Authority for Requirement:  
Iowa DNR Construction Permit 81-A-053-S1  
567 IAC 23.3(3)"e"

Pollutant: VOC's  
Emission Limit(s): 3.5 lb/hr.

Authority for Requirement:  
Iowa DNR Construction Permit 81-A-053-S1

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(1) An exceedance of the indicator opacity of (5%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 81-A-053-S1

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

Stack Height, (ft, from the ground): 115
Stack Opening, (inches, dia.): 32
Exhaust Flow Rate (scfm): 18,000
Exhaust Temperature (°F): 130
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 81-A-053-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing Completed:
Pollutant – VOC’s²
Stack Test Completed on – November 9, 2005
Result Emission Rate – 0.88 lb/hr.
Test Method – Iowa DNR Approved Method
Authority for Requirement – Iowa DNR Construction Permit 81-A-053-S1

Stack Testing:
Pollutant – Particulate Matter⁽¹⁾
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)
This emission unit is scheduled to be shutdown and removed from the facility. If this unit is permanently shutdown prior to the required testing date, the stack test is not required.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 38-15 & 38-16

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>38-15</td>
<td>EU38-15</td>
<td>Feed Silo No. 1</td>
<td>CE38-15: Baghouse</td>
<td>Feed</td>
<td>509,000 lbs.</td>
<td>72-A-189-S1</td>
</tr>
<tr>
<td>38-16</td>
<td>EU38-16</td>
<td>Feed Silo No. 2</td>
<td>CE38-16: Baghouse</td>
<td>Feed</td>
<td>509,000 lbs.</td>
<td>03-A-1271</td>
</tr>
</tbody>
</table>

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): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permits 72-A-189-S1 & 03-A-1271
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permits 72-A-189-S1 & 03-A-1271
567 IAC 23.4(7)

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (25%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Emission limit is expressed as the average of three runs.
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 69
- Stack Opening, (inches): 5.625 x 8.25
- Exhaust Flow Rate (scfm): 1000
- Exhaust Temperature (°F): 90
- Discharge Style: Vertical Obstructed

Authority for Requirement: Iowa DNR Construction Permits 72-A-189-S1 & 03-A-1271

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 38-17**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU38-17</td>
<td>Feed Silo No. 3</td>
<td>CE38-17: Baghouse</td>
<td>Feed</td>
<td>135 tons/hr.</td>
</tr>
</tbody>
</table>

**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: Iowa DNR Construction Permit 72-A-187
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 72-A-187
567 IAC 23.4(7)

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

**Stack Testing:**
Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

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

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

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

**Compliance Assurance Monitoring (CAM) Plan Required?**  Yes ☐ No ☑
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: 38-63

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU38-1</td>
<td>Pellet Loadout – Rail</td>
<td></td>
<td>Pellets</td>
<td>160 tons/hr.</td>
</tr>
<tr>
<td>EU38-2</td>
<td>Pellet/Gluten Loadout - Truck</td>
<td>CE38-63: Dust Collector</td>
<td>Pellets Corn Gluten</td>
<td>160 tons/hr. 80 tons/hr.</td>
</tr>
<tr>
<td>EU38-3</td>
<td>Gluten Loadout – Rail</td>
<td></td>
<td>Corn Gluten</td>
<td>80 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2 567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.54 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2

Pollutant: Particulate Matter
Emission Limit(s): 1.54 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2 567 IAC 23.3(2)"a"

Pollutant: VOC's
Emission Limit(s): 0.41 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2

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

\(^{(2)}\) Standard is expressed as the average of three runs.
**Operational Limits & Requirements**

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

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.

Reporting & Record keeping:

Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 90
Stack Opening, (inches): 20 x 20
Exhaust Flow Rate (scfm): 18,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-303-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing:**

Pollutant – PM-10
Stack test to be Completed by – December 5, 2008
Test Method – 40 CFR 51, Appendix M, 201A with 202*
Authority for Requirement - 567 IAC 22.108(3)

* Or approved alternative.

Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

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

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

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: 38-F2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU38-F2</td>
<td>Feed Loadout (Non-Captured)</td>
<td>NA</td>
<td>Feed/Gluten Meal</td>
<td>160 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

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

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

Agency Approved Operation & Maintenance Plan Required? Yes [ ] No [x]
Facility Maintained Operation & Maintenance Plan Required? Yes [ ] No [x]
Compliance Assurance Monitoring (CAM) Plan Required? Yes [ ] No [x]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 4-39, 4-41, 4-42, 4-X8

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-4</td>
<td>Gluten Meal Dewatering</td>
<td>NA</td>
<td>Fugitive SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

**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: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  57-16

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU57-16</td>
<td>Feed Bulk Loadout</td>
<td>CE57-16: Baghouse</td>
<td>Gluten Feed</td>
<td>200 tons/hr.</td>
</tr>
</tbody>
</table>

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): 0.05 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 86-A-022

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 57-F1 & 57-F2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>57-F1</td>
<td>EU57-F1</td>
<td>Pellet Barge Loadout</td>
<td>NA</td>
<td>Feed</td>
<td>NA</td>
</tr>
<tr>
<td>57-F2</td>
<td>EU57-F2</td>
<td>Pellet Truck Loadout</td>
<td>NA</td>
<td>Feed</td>
<td>NA</td>
</tr>
</tbody>
</table>

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.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  81-37, 81-38, 81-39

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-81</td>
<td>Building 81 – Gluten Filters</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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:  Sulfur Dioxide (SO₂)
Emission Limit(s):  0.006 lb/hr., 500 ppmv
Authority for Requirement:  Iowa DNR Construction Permit 90-A-073
567 IAC 23.3(3)"e"

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

EP81-37:
Stack Height, (meters, from the ground):  14.3
Stack Opening, (meters, dia.):  0.46

EP's 81-38 & 81-39
Stack Height, (meters, from the ground):  4.3
Stack Opening, (meters, dia.):  0.46

Authority for Requirement:  Iowa DNR Construction Permit 90-A-073

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point.  The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 92-26, 92-27, 92-28, 92-29, 92-30, 92-31, 92-32, 92-33, 92-34, 92-35, 92-36

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-92</td>
<td>Building 92 – Gluten Filters</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Sulfur Dioxide (SO₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92-26</td>
<td>0.012 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-27</td>
<td>0.012 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-28</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-29</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-30</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-31</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-32</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-33</td>
<td>0.008 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-34</td>
<td>0.003 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-35</td>
<td>0.012 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>92-36</td>
<td>500 ppmv</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 90-A-072
567 IAC 23.3(3)"e"
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height (meters, from the ground)</th>
<th>Stack Opening (meters, dia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>92-26</td>
<td>14.9</td>
<td>0.91</td>
</tr>
<tr>
<td>92-27</td>
<td>14.9</td>
<td>0.91</td>
</tr>
<tr>
<td>92-28</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-29</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-30</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-31</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-32</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-33</td>
<td>14.0</td>
<td>0.61</td>
</tr>
<tr>
<td>92-34</td>
<td>14.0</td>
<td>0.46</td>
</tr>
<tr>
<td>92-35</td>
<td>4.3</td>
<td>0.76</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 90-A-072

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)
## Gluten Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-17</td>
<td>EU17-61</td>
<td>No. 5 Gluten Intensa Dryer*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU17-62</td>
<td>No. 6 Gluten Intensa Dryer*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU4-40</td>
<td>No. 1 Gluten Intensa Dryer*</td>
<td></td>
</tr>
<tr>
<td>11-18</td>
<td>EU11-18</td>
<td>No. 5 &amp; 6 Gluten Intensa Transport</td>
<td>94-A-296-S1</td>
</tr>
<tr>
<td>6-48</td>
<td>EU6-48</td>
<td>No. 1 Gluten Intensa Transport</td>
<td>05-A-597</td>
</tr>
<tr>
<td>11-26</td>
<td>EU11-26</td>
<td>No. 1 Intensa Cooling Transport</td>
<td>94-A-297-S1</td>
</tr>
<tr>
<td>14-60</td>
<td>EU14-60</td>
<td>No. 8 &amp; 9 Vacuum Pump</td>
<td>94-A-298-S1</td>
</tr>
<tr>
<td>38-18</td>
<td>EU38-18</td>
<td>No. 4 Gluten Silo</td>
<td>72-A-187</td>
</tr>
<tr>
<td>38-19</td>
<td>EU38-19</td>
<td>No. 5 Gluten Silo</td>
<td></td>
</tr>
<tr>
<td>38-F1</td>
<td>EU38-F1</td>
<td>Gluten Loadout (Non-Captured)</td>
<td>NA</td>
</tr>
<tr>
<td>5-41</td>
<td>EU5-41</td>
<td>No. 7 Vacuum Pump</td>
<td>94-A-295-S3</td>
</tr>
<tr>
<td></td>
<td>EU5-42</td>
<td>No. 6 Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU5-43</td>
<td>No. 5 Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU5-44</td>
<td>No. 4 Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU5-45</td>
<td>No. 3 Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU5-46</td>
<td>No. 2 Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU5-47</td>
<td>No. 1 Vacuum Pump</td>
<td></td>
</tr>
</tbody>
</table>

* The Applicable Requirements for these emission units are included in the Feed Process Group (additional emission units vent through EP B-17).
Emission Point ID Number: 11-18

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU11-18</td>
<td>No. 5 &amp; 6 Intensa Transport</td>
<td>CE11-18: Baghouse</td>
<td>Gluten</td>
<td>18.75 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40%(1)
Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.15 lb/hr.(2)
Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 3.0 lb/hr.(2)
Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
1. The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1

Compliance Plan
The owner/operator of this equipment shall comply with the applicable requirements listed below.
With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Condition(s)
This emission point failed to demonstrate compliance with the VOC emission limit from construction permit 94-A-296-S1. ADM submitted a construction permit application on October 2, 2006 to modify the VOC emission limit for this source. This emission point will be considered to be in compliance when the construction permit modification for this emission point is issued.

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

Stack Height, (ft, from the ground): 79
Stack Opening, (inches): 22 x 25.5
Exhaust Flow Rate (scfm): 21,500
Exhaust Temperature (°F): 70
Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-296-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Stack Testing Completed:**
- Pollutant – VOC's
- Stack Test Completed on – November 9, 2005
- Result Emission Rate – 5.319 lb/hr.
- Test Method – Iowa DNR Approved Method
- Authority for Requirement – Iowa DNR Construction Permit 94-A-296-S1

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: 6-48**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU6-48</td>
<td>No. 1 Gluten Intensa Transport</td>
<td>CE6-48: Baghouse</td>
<td>Gluten</td>
<td>7.5 tons/hr.</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

Pollutant: Opacity
Emission Limit(s): 40%\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-597
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.64 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-597

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 05-A-597
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 05-A-597
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 2.10 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-597

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Operational Limits & Requirements**

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

Control equipment parameters:

1. The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:

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

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

Authority for Requirement: Iowa DNR Construction Permit 05-A-597

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 67
- Stack Opening, (inches): 21 x 25.5
- Exhaust Flow Rate (scfm): 15,000
- Exhaust Temperature (°F): 70
- Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 05-A-597

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 11-26

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU11-26</td>
<td>No. 1 Intensa Cooling Transport</td>
<td>CE11-26: Baghouse</td>
<td>Corn Gluten</td>
<td>7.5 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40%\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.13 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 0.43 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
1. The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1

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

Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 3,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-297-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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: 14-60

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU14-60A</td>
<td>No. 8 Vacuum Pump</td>
<td>NA</td>
<td>Corn Gluten</td>
<td>2100 cfm</td>
</tr>
<tr>
<td>EU14-60B</td>
<td>No. 9 Vacuum Pump</td>
<td>NA</td>
<td>Corn Gluten</td>
<td>2700 cfm</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-298-S1
567 IAC 23.3(2)"d"

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

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 0.2 lb/hr.\(^{(2)}\), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-298-S1
567 IAC 23.3(3)"e"

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

\(^{(2)}\) Standard is expressed as the average of three runs.
Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 87
Stack Opening, (inches, dia.): 10
Exhaust Flow Rate (scfm): 4500
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 94-A-298-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

Monitoring Requirements

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  38-18 & 38-19

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>38-18</td>
<td>EU38-18</td>
<td>No. 4 Gluten Silo</td>
<td>CE38-18: Baghouse</td>
<td>Gluten</td>
<td>23.83 tons/hr.</td>
</tr>
<tr>
<td>38-19</td>
<td>EU38-19</td>
<td>No. 5 Gluten Silo</td>
<td>CE38-19: Baghouse</td>
<td>Gluten</td>
<td>23.83 tons/hr.</td>
</tr>
</tbody>
</table>

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):  40 %
Authority for Requirement:  Iowa DNR Construction Permit 72-A-187
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s):  0.1 gr/scf
Authority for Requirement:  Iowa DNR Construction Permit 72-A-187
567 IAC 23.3(2)"a"

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

Agency Approved Operation & Maintenance Plan Required?  Yes ☒ No ☐
(Required for CE38-18 and CE38-19)

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: 38-F1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU38-F1</td>
<td>Gluten Loadout (Non-Captured)</td>
<td>NA</td>
<td>Gluten</td>
<td>27.6 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: 5-41**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU5-41</td>
<td>No. 7 Vacuum Pump CE5-41: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-42</td>
<td>No. 6 Vacuum Pump CE5-42: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-43</td>
<td>No. 5 Vacuum Pump CE5-43: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-44</td>
<td>No. 4 Vacuum Pump CE5-44: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-45</td>
<td>No. 3 Vacuum Pump CE5-45: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-46</td>
<td>No. 2 Vacuum Pump CE5-46: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
<tr>
<td>EU5-47</td>
<td>No. 1 Vacuum Pump CE5-47: Scrubber</td>
<td>Cornd Gluten</td>
<td>120,000 dscf/hr.</td>
<td></td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

**Pollutant: Opacity**

Emission Limit(s): 40 %\(^{(1)}\)

Authority for Requirement: Iowa DNR Construction Permit 94-A-295-S3 567 IAC 23.3(2)"d"

**Pollutant: Sulfur Dioxide (SO\(_2\))**

Emission Limit(s): 0.43 lb/hr.\(^{(2)}\), 500 ppmv

Authority for Requirement: Iowa DNR Construction Permit 94-A-295-S3 567 IAC 23.3(3)"e"

**Pollutant: VOC's**

Emission Limit(s): 5.27 lb/hr.\(^{(2)}\)

Authority for Requirement: Iowa DNR Construction Permit 94-A-295-S3

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard id expressed as the average of 3 runs.
**Operational Limits & Requirements**

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

Control equipment parameters:

1. The control equipment shall be inspected and maintained according to manufacturer's specifications.

Reporting & Record keeping:

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

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

Authority for Requirement: Iowa DNR Construction Permit 94-A-295-S3

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 53
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 15,300
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-295-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing:**

Pollutant – Sulfur Dioxide (SO₂)¹

Stack test to be Completed by – December 5, 2008
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

¹ These emission units are scheduled to be combined with EU14-60 into a single stack. If this relocation is completed prior to the required testing date, the test will not be required.

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

Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for all associated pieces of control equipment)

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)
# Steepwater Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-63</td>
<td>EU1-63A</td>
<td>#1 Batch Steep House (Vents Inside)</td>
<td>05-A-609</td>
</tr>
<tr>
<td></td>
<td>EU1-63B</td>
<td>#2 Batch Steep House (Vents Inside)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU1-63C</td>
<td>#3 Batch Steep House (Vents Inside)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU1-63D</td>
<td>#4 Batch Steep House (Vents Inside)</td>
<td></td>
</tr>
<tr>
<td>216-57</td>
<td>EU216-57A</td>
<td>C-4 Heavy Steepwater Tank</td>
<td>96-A-715-S1</td>
</tr>
<tr>
<td></td>
<td>EU216-57B</td>
<td>C-6 Light Steepwater Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU216-57C</td>
<td>C-7 Heavy Steepwater Tank</td>
<td></td>
</tr>
<tr>
<td>40-1</td>
<td>EU40-1</td>
<td>Light Steepwater Tank</td>
<td>05-A-526</td>
</tr>
<tr>
<td>40-2</td>
<td>EU40-2</td>
<td>Swing Steepwater Tank</td>
<td>05-A-527</td>
</tr>
<tr>
<td>40-3</td>
<td>EU40-3</td>
<td>Heavy Steepwater Tank</td>
<td>05-A-528</td>
</tr>
<tr>
<td>3-1</td>
<td>EU3-1</td>
<td>Steepwater Vapor Condensate Tank</td>
<td>05-A-576</td>
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<tr>
<td>3-2</td>
<td>EU3-2</td>
<td>Steepwater Vacuum Pump</td>
<td>96-A-721-S1</td>
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<tr>
<td></td>
<td>EU3-2A</td>
<td>S-8 Evaporator Vacuum Pump</td>
<td></td>
</tr>
<tr>
<td>7-6</td>
<td>EUB-7</td>
<td>Building 7 – Wet Milling</td>
<td>90-A-068</td>
</tr>
<tr>
<td>7-9</td>
<td>EU7-16A</td>
<td>Millwater I Tank</td>
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<tr>
<td>7-10</td>
<td>EU7-16B</td>
<td>Millwater II Tank</td>
<td></td>
</tr>
<tr>
<td>7-11</td>
<td>EU7-16B1</td>
<td>Millwater II 2 Tank</td>
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<tr>
<td>7-12</td>
<td>EU7-16C</td>
<td>Sulfur Burner Absorption Tower</td>
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<tr>
<td>7-13</td>
<td>EU7-16D</td>
<td>Combined Fiber Tank</td>
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<tr>
<td>7-14</td>
<td>EU7-16E</td>
<td>Germ Tank</td>
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</tr>
<tr>
<td>7-15</td>
<td>EU7-16F</td>
<td>3rd Stage Germ Water Tank</td>
<td>94-A-309-S1</td>
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<tr>
<td>7-16</td>
<td>EU7-16G</td>
<td>2nd Stage Germ Water Tank</td>
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<tr>
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<td>EU7-16H</td>
<td>MST Feed Tank</td>
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<td>EU7-16I</td>
<td>Clarifier Feed Tank</td>
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<td>EU7-16J</td>
<td>Dorr Clone Feed Tank</td>
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<td>EU7-16K</td>
<td>Molten Sulfur Tank</td>
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<td>EU7-16L</td>
<td>Heavy Gluten Tank</td>
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<td>EU7-16M</td>
<td>GT Feed Tank</td>
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<td>EU7-16N</td>
<td>Millwater III Tank</td>
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<td>EU7-16O</td>
<td>1st Stage Fiber Wash Tank</td>
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<td></td>
<td>EU7-16P</td>
<td>1st Grind Tank</td>
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<td></td>
<td>EU7-16Q</td>
<td>2nd Grind Tank</td>
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<tr>
<td></td>
<td>EU7-16R</td>
<td>Primary Feed Tank</td>
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<td>EU7-16S</td>
<td>3rd Grind Tank</td>
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<td></td>
<td>EU7-16T</td>
<td>2nd Stage Fiber Wash Tank</td>
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<td></td>
<td>EU7-16U</td>
<td>3rd Stage Fiber Wash Tank</td>
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</tr>
</tbody>
</table>
## Steepwater Process Equipment List (cont.)

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-16</td>
<td>EU7-16V</td>
<td>4th Stage Fiber Wash Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU7-16W</td>
<td>5th Stage Fiber Wash Tank</td>
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</tr>
<tr>
<td></td>
<td>EU7-16X</td>
<td>6th Stage Fiber Wash Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU7-16Y</td>
<td>2nd &amp; 3rd Set Fiber Wash Tanks</td>
<td>94-A-309-S1</td>
</tr>
<tr>
<td></td>
<td>EU7-16Z</td>
<td>Corn Hopper</td>
<td></td>
</tr>
<tr>
<td>8-1</td>
<td>EUB-8</td>
<td>Building 8 - Corn Steeping</td>
<td>NA</td>
</tr>
<tr>
<td>8-2</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>8-3</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>8-4</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>10-1</td>
<td>EUB-10</td>
<td>Building 10 – Steep House</td>
<td>90-A-070</td>
</tr>
<tr>
<td>10-2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEEP</td>
<td>16-1</td>
<td>#1 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-2</td>
<td>#2 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-3</td>
<td>#3 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-4</td>
<td>#4 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-5</td>
<td>#5 Continuous Steep Tank</td>
<td>05-A-610</td>
</tr>
<tr>
<td></td>
<td>16-6</td>
<td>#6 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-7</td>
<td>#7 Continuous Steep Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16-8</td>
<td>#8 Continuous Steep Tank</td>
<td></td>
</tr>
</tbody>
</table>
Emission Point ID Number: 1-63

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU1-63A</td>
<td>#1 Batch Steep House (Vents Inside)</td>
<td>NA</td>
<td>Steepwater</td>
<td>274 gallons/min.</td>
</tr>
<tr>
<td>EU1-63B</td>
<td>#2 Batch Steep House (Vents Inside)</td>
<td>NA</td>
<td>Steepwater</td>
<td>274 gallons/min.</td>
</tr>
<tr>
<td>EU1-63C</td>
<td>#3 Batch Steep House (Vents Inside)</td>
<td>NA</td>
<td>Steepwater</td>
<td>274 gallons/min.</td>
</tr>
<tr>
<td>EU1-63D</td>
<td>#4 Batch Steep House (Vents Inside)</td>
<td>NA</td>
<td>Steepwater</td>
<td>274 gallons/min.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %(1)
Authority for Requirement: Iowa DNR Construction Permit 05-A-609 567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.75 lb/hr.(2), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 05-A-609 567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 2.83 lb/hr.(2)
Authority for Requirement: Iowa DNR Construction Permit 05-A-609

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs.
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Exhaust Temperature (°F): 90  
Authority for Requirement: Iowa DNR Construction Permit 05-A-609

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 216-57

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU216-57A*</td>
<td>C-4 Heavy Steepwater Tank</td>
<td>NA</td>
<td>Heavy Steepwater</td>
<td>142,000 gallons</td>
</tr>
<tr>
<td>EU216-57B*</td>
<td>C-6 Light Steepwater Tank</td>
<td>NA</td>
<td>Light Steepwater</td>
<td>335,000 gallons</td>
</tr>
<tr>
<td>EU216-57C*</td>
<td>C-7 Heavy Steepwater Tank</td>
<td>NA</td>
<td>Heavy Steepwater</td>
<td>72,000 gallons</td>
</tr>
</tbody>
</table>

* These units are scheduled to be removed from the facility and replaced by three new tanks (EU's 40-1, 40-2, and 40-3) which are included in this permit.

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 28.97 tons/yr.(1), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 96-A-715-S1 567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 14.4 tons/yr.(1)
Authority for Requirement: Iowa DNR Construction Permit 96-A-715-S1

(1) Standard is a twelve-month rolling total.

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

Stack Height, (ft, from the ground): 54
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (acfm): 194
Exhaust Temperature (°F): 180
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 96-A-715-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Numbers: 40-1, 40-2, 40-3

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-1</td>
<td>EU40-1</td>
<td>Light Steepwater Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td>130,000 gallons</td>
<td>05-A-526</td>
</tr>
<tr>
<td>40-2</td>
<td>EU40-2</td>
<td>Swing Steepwater Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td>100,000 gallons</td>
<td>05-A-527</td>
</tr>
<tr>
<td>40-3</td>
<td>EU40-3</td>
<td>Heavy Steepwater Tank</td>
<td>NA</td>
<td>Stepwater</td>
<td>100,000 gallons</td>
<td>05-A-528</td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Sulfur Dioxide (SO₂)</th>
<th>VOC's</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-1</td>
<td>0.66 tons/yr.(1), 500 ppmv</td>
<td>2.79 tons/yr.(1)</td>
<td>05-A-526, 567 IAC 23.3(3)&quot;e&quot;</td>
</tr>
<tr>
<td>40-2</td>
<td>0.66 tons/yr.(1), 500 ppmv</td>
<td>2.75 tons/yr.(1)</td>
<td>05-A-527, 567 IAC 23.3(3)&quot;e&quot;</td>
</tr>
<tr>
<td>40-3</td>
<td>0.15 tons/yr.(1), 500 ppmv</td>
<td>0.65 tons/yr.(1)</td>
<td>05-A-528, 567 IAC 23.3(3)&quot;e&quot;</td>
</tr>
</tbody>
</table>

#### Emission Point Characteristics

The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height, (ft, from the ground)</th>
<th>Stack Opening, (inches, dia.)</th>
<th>Exhaust Flow Rate (acfm)</th>
<th>Exhaust Temperature (°F)</th>
<th>Discharge Style</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-1</td>
<td>35</td>
<td>8</td>
<td>135</td>
<td>120</td>
<td>Vertical Unobstructed</td>
<td>05-A-526</td>
</tr>
<tr>
<td>40-2</td>
<td>25</td>
<td>8</td>
<td>135</td>
<td>180</td>
<td>Vertical Unobstructed</td>
<td>05-A-527</td>
</tr>
<tr>
<td>40-3</td>
<td>25</td>
<td>8</td>
<td>60</td>
<td>180</td>
<td>Vertical Unobstructed</td>
<td>05-A-528</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Agency Approved Operation & Maintenance Plan Required?  Yes □ No ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes □ No ☒

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: 3-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU3-1</td>
<td>Steepwater Vapor Condensate Tank</td>
<td>NA</td>
<td>Steepwater Vapor</td>
<td>2500 gallons</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

- **Pollutant**: Opacity  
  Emission Limit(s): 40 %\(^{(1)}\)  
  Authority for Requirement: Iowa DNR Construction Permit 05-A-576  
  567 IAC 23.3(2)"d"

- **Pollutant**: Sulfur Dioxide (SO\(_2\))  
  Emission Limit(s): 0.32 lb/hr.\(^{(2)}\), 500 ppmv  
  Authority for Requirement: Iowa DNR Construction Permit 05-A-576  
  567 IAC 23.3(3)"e"

- **Pollutant**: VOC's  
  Emission Limit(s): 6.85 lb/hr.\(^{(2)}\)  
  Authority for Requirement: Iowa DNR Construction Permit 05-A-576

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 56  
Stack Opening, (inches, dia.): 10  
Exhaust Flow Rate (acfm): 135  
Exhaust Temperature (°F): 140  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-576

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing Completed:  
Pollutant – VOC's  
Stack Test Completed on – December 7, 2005  
Result Emission Rate – 0.24 lb/hr.  
Test Method – Iowa DNR Approved Method  
Authority for Requirement – 05-A-576

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 3-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU3-2</td>
<td>Steepwater Vacuum Pump</td>
<td>NA</td>
<td>Steepwater</td>
<td>84,000 gallons/hr.</td>
</tr>
<tr>
<td>EU3-2A</td>
<td>S-8 Evaporator Pump</td>
<td></td>
<td>Steepwater</td>
<td>84,000 gallons/hr.</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 96-A-721-S1
567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.65 lb/hr. (2), 7.24 tons/yr. (3), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 96-A-721-S1
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 1.48 lb/hr. (2)
Authority for Requirement: Iowa DNR Construction Permit 96-A-721-S1

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs

(3) Standard is a 12-month rolling total.
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 40
- Stack Opening, (inches, dia.): 12
- Exhaust Flow Rate (scfm): 1,250
- Exhaust Temperature (°F): 90
- Discharge Type: Horizontal
- Authority for Requirement: Iowa DNR Construction Permit 96-A-721-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  7-6, 7-9, 7-10, 7-11, 7-12, 7-13, 7-14, 7-15, 7-17

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-7</td>
<td>Building 7 – Wet Milling</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Sulfur Dioxide (SO₂)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-6</td>
<td>0.005 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-9</td>
<td>0.005 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-10</td>
<td>0.1 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-11</td>
<td>0.1 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-12</td>
<td>0.006 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-13</td>
<td>0.85 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-14</td>
<td>0.009 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-15</td>
<td>0.2 lb/hr., 500 ppmv</td>
</tr>
<tr>
<td>7-17</td>
<td>0.1 lb/hr., 500 ppmv</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 90-A-068
567 IAC 23.3(3)"e"
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height (meters, from the ground)</th>
<th>Stack Opening (meters, dia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-6</td>
<td>25.3</td>
<td>0.91</td>
</tr>
<tr>
<td>7-9</td>
<td>6.4</td>
<td>0.91</td>
</tr>
<tr>
<td>7-10</td>
<td>10.4</td>
<td>0.91</td>
</tr>
<tr>
<td>7-11</td>
<td>10.4</td>
<td>0.91</td>
</tr>
<tr>
<td>7-12</td>
<td>6.4</td>
<td>1.22</td>
</tr>
<tr>
<td>7-13</td>
<td>8.2</td>
<td>0.36</td>
</tr>
<tr>
<td>7-14</td>
<td>9.1</td>
<td>0.41</td>
</tr>
<tr>
<td>7-15</td>
<td>23.8</td>
<td>0.51</td>
</tr>
<tr>
<td>7-17</td>
<td>6.7</td>
<td>0.91</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 90-A-068

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

Agency Approved Operation & Maintenance Plan Required? Yes □ No ☑

Facility Maintained Operation & Maintenance Plan Required? Yes □ No ☑

Compliance Assurance Monitoring (CAM) Plan Required? Yes □ No ☑

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: 7-16

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU7-16A</td>
<td>Millwater I Tank</td>
<td></td>
<td>Millwater</td>
<td>91,000 gallons</td>
</tr>
<tr>
<td>EU7-16B</td>
<td>Millwater II Tank</td>
<td></td>
<td>Millwater</td>
<td>91,000 gallons</td>
</tr>
<tr>
<td>EU7-16B1</td>
<td>Millwater II 2 Tank</td>
<td></td>
<td>Millwater</td>
<td>14,700 gallons</td>
</tr>
<tr>
<td>EU7-16C</td>
<td>Sulfur Burner Absorption Tower</td>
<td></td>
<td>Sulfur</td>
<td>10 tons/day</td>
</tr>
<tr>
<td>EU7-16D</td>
<td>Combined Fiber Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>5,200 gallons</td>
</tr>
<tr>
<td>EU7-16E</td>
<td>Germ Tank</td>
<td></td>
<td>Corn Germ</td>
<td>2,250 gallons</td>
</tr>
<tr>
<td>EU7-16F</td>
<td>3rd Stage Germ Water Tank</td>
<td></td>
<td>Millwater</td>
<td>1,270 gallons</td>
</tr>
<tr>
<td>EU7-16G</td>
<td>2nd Stage Germ Water Tank</td>
<td></td>
<td>Millwater</td>
<td>1,100 gallons</td>
</tr>
<tr>
<td>EU7-16H</td>
<td>MST Feed Tank</td>
<td></td>
<td>Mill Starch</td>
<td>40,800 gallons</td>
</tr>
<tr>
<td>EU7-16I</td>
<td>Clarifier Feed Tank</td>
<td></td>
<td>Mill Starch</td>
<td>39,375 gallons</td>
</tr>
<tr>
<td>EU7-16J</td>
<td>Dorr Clone Feed Tank</td>
<td></td>
<td>Starch</td>
<td>39,375 gallons</td>
</tr>
<tr>
<td>EU7-16K</td>
<td>Molten Sulfur Tank</td>
<td></td>
<td>Sulfur</td>
<td>27,300 gallons</td>
</tr>
<tr>
<td>EU7-16L</td>
<td>Heavy Gluten Tank</td>
<td></td>
<td>Heavy Gluten</td>
<td>5,300 gallons</td>
</tr>
<tr>
<td>EU7-16M</td>
<td>GT Feed Tank</td>
<td></td>
<td>Gluten</td>
<td>39,375 gallons</td>
</tr>
<tr>
<td>EU7-16N</td>
<td>Millwater III Tank</td>
<td></td>
<td>Millwater</td>
<td>28,000 gallons</td>
</tr>
<tr>
<td>EU7-16O</td>
<td>1st Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>15,200 gallons</td>
</tr>
<tr>
<td>EU7-16P</td>
<td>1st Grind Tank</td>
<td></td>
<td>Corn</td>
<td>28,300 gallons</td>
</tr>
<tr>
<td>EU7-16Q</td>
<td>2nd Grind Tank</td>
<td></td>
<td>Corn</td>
<td>18,800 gallons</td>
</tr>
<tr>
<td>EU7-16R</td>
<td>Primary Feed Tank</td>
<td></td>
<td>Mill Starch</td>
<td>39,375 gallons</td>
</tr>
<tr>
<td>EU7-16S</td>
<td>3rd Grind Tank</td>
<td></td>
<td>Corn</td>
<td>28,900 gallons</td>
</tr>
<tr>
<td>EU7-16T</td>
<td>2nd Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>3,825 gallons</td>
</tr>
<tr>
<td>EU7-16U</td>
<td>3rd Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>3,825 gallons</td>
</tr>
<tr>
<td>EU7-16V</td>
<td>4th Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>3,825 gallons</td>
</tr>
<tr>
<td>EU7-16W</td>
<td>5th Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>3,825 gallons</td>
</tr>
<tr>
<td>EU7-16X</td>
<td>6th Stage Fiber Wash Tank</td>
<td></td>
<td>Corn Fiber</td>
<td>3,825 gallons</td>
</tr>
<tr>
<td>EU7-16Y</td>
<td>2nd &amp; 3rd Set Fiber Wash Tanks</td>
<td></td>
<td>Corn Fiber</td>
<td>20,040 gallons (total)</td>
</tr>
<tr>
<td>EU7-16Z</td>
<td>Corn Hopper</td>
<td></td>
<td>Corn</td>
<td>16,600 bushels</td>
</tr>
</tbody>
</table>

CE7-16: SO₂ Scrubber
CE7-16A: VOC Scrubber

92-0265 ADM Clinton

Permit 06-TV-007: 12/5/2006
**Applicable Requirements**

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

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

- **Pollutant:** Opacity  
  **Emission Limit(s):** 40%\(^{(1)}\)  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-309-S1  
  567 IAC 23.3(2)"d"

- **Pollutant:** PM-10  
  **Emission Limit(s):** 0.3 lb/hr.\(^{(2)}\)  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-309-S1

- **Pollutant:** Particulate Matter  
  **Emission Limit(s):** 0.3 lb/hr.\(^{(2)}\), 0.1 gr/dscf  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-309-S1  
  567 IAC 23.3(2)"a"

- **Pollutant:** Sulfur Dioxide (SO\(_2\))  
  **Emission Limit(s):** 14.0 lb/hr.\(^{(2)}\), 500 ppmv  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-309-S1  
  567 IAC 23.3(3)"e"

- **Pollutant:** VOC's  
  **Emission Limit(s):** 95% control or 20 ppmv\(^{(3)}\)  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-309-S1

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, **Opacity Limits**, if visible emissions are observed other than start-up, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

\(^{(2)}\) Standard is expressed as the average of 3 runs.

\(^{(3)}\) Limit required on the emissions from the Millhouse Scrubber per the consent decree entered into between the United States and ADM [Civil Action 03-2066, United States District Court for the Central District of Illinois (August 21, 2003)].
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
1. Per the consent decree entered into between the United States and ADM [Civil Action 03-2066, United States District Court for the Central District of Illinois (August 21, 2003)], the facility shall determine the appropriate limits on scrubbing flowrate and pressure drop for the VOC scrubber (CE 7-16A) based on the actual operating conditions at the time of the successful performance test and propose those values to the Department after the testing is completed.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The facility shall monitor and record scrubbing flowrate and pressure drop for the scrubbers once per day per the consent decree entered into between the United States and ADM [Civil Action 03-2066, United States District Court for the Central District of Illinois (August 21, 2003)].

Authority for Requirement: Iowa DNR Construction Permit 94-A-309-S1

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

Stack Height, (ft, from the ground): 104  
Stack Opening, (inches, dia.): 54  
Exhaust Flow Rate (scfm): 35,000  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  

Authority for Requirement: Iowa DNR Construction Permit 94-A-309-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

**Stack Testing:**
- **Pollutant – Sulfur Dioxide (SO₂):**
  - Stack test to be completed by within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date.
  - Test Method: 40 CFR 60, Appendix A, Method 6C\(^{(1)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-309-S1

- **Pollutant – VOC’s\(^{(2)}\):**
  - Stack test to be completed by within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date.
  - Test Method: Per Consent Decree 8/21/03 \(^{(1),(3)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-309-S1

\(^{(1)}\) Test Run Time = 1 hour

\(^{(2)}\) VOC testing shall include both the inlet and outlet of the VOC scrubber. However, if the ppm emission limit listed in Condition 10 is met, only outlet testing is required.

\(^{(3)}\) As applicable, Methods 1, 2, 3A or B, 4, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used. Tests to obtain VOC mass emission rates (i.e. Methods 1, 2, 3A or B, 4, and 18 as modified to include NCASI CI/WP-98.01 plus method 25) need only be performed on the exhaust from the final control equipment. Outlet testing and control efficiency testing will be based on either Method 25 or Method 25A calibrated to propane, whichever is applicable depending on concentration (i.e. Method 25 is used on both the inlet and outlet when the outlet total hydrocarbon (THC) concentration is \(\geq 50\) ppm as carbon and Method 25A is used on both the inlet and outlet when the outlet THC concentration is \(< 50\) ppm as carbon).

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

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

(Required for CE7-16 and CE7-16A)

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 8-1, 8-2, 8-3, 8-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-8</td>
<td>Building 8 – Corn Steeping</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 10-1, 10-2, 10-3, 10-4, 10-5, 10-6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB-10</td>
<td>Building 10 – Steep House</td>
<td>NA</td>
<td>Non-Captured SO₂</td>
<td>NA</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.0142 lb/hr., 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 90-A-070
567 IAC 23.3(3)"e"

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

Stack Height, (meters, from the ground): 23.5
Stack Opening, (meters, dia.): 0.91
Authority for Requirement: Iowa DNR Construction Permit 90-A-070

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: STEEP (Open to Atmosphere)

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-1</td>
<td>#1 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-2</td>
<td>#2 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-3</td>
<td>#3 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-4</td>
<td>#4 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-5</td>
<td>#5 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-6</td>
<td>#6 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-7</td>
<td>#7 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
<tr>
<td>16-8</td>
<td>#8 Continuous Steep Tank</td>
<td>NA</td>
<td>Steepwater</td>
<td></td>
</tr>
</tbody>
</table>

680 gallons/min.

### Applicable Requirements

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

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

- **Pollutant:** Opacity
  - Emission Limit(s): 40 %\(^{(1)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 05-A-610 567 IAC 23.3(2)"d"

- **Pollutant:** Sulfur Dioxide (SO₂)
  - Emission Limit(s): 0.45 lb/hr.\(^{(2)}\), 500 ppmv
  - Authority for Requirement: Iowa DNR Construction Permit 05-A-610 567 IAC 23.3(3)"e"

- **Pollutant:** VOC's
  - Emission Limit(s): 1.57 lb/hr.\(^{(2)}\)
  - Authority for Requirement: Iowa DNR Construction Permit 05-A-610

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Exhaust Temperature (°F): 90

Authority for Requirement: Iowa DNR Construction Permit 05-A-610

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
# Elevator Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>EU1-1</td>
<td>Rail Receiving No. 1</td>
<td>94-A-307-S2</td>
</tr>
<tr>
<td>1-2</td>
<td>EU1-2</td>
<td>Rail Receiving No. 2</td>
<td>05-A-390</td>
</tr>
<tr>
<td>1-3</td>
<td>EU1-3</td>
<td>Grain Handling/Cleaning No. 1</td>
<td>05-A-391-S1</td>
</tr>
<tr>
<td>1-4</td>
<td>EU1-4</td>
<td>Grain Handling/Cleaning</td>
<td>05-A-392</td>
</tr>
<tr>
<td>B-15</td>
<td>EU15-1</td>
<td>No. 1 Corn Truck Dump</td>
<td>94-A-592-S1</td>
</tr>
<tr>
<td></td>
<td>EU15-2</td>
<td>No. 2 Corn Truck Dump</td>
<td></td>
</tr>
<tr>
<td>15-F1</td>
<td>EU15-F1</td>
<td>Truck Unloading (Non-Captured)</td>
<td>NA</td>
</tr>
<tr>
<td>15-F2</td>
<td>EU15-F2</td>
<td>Rail Unloading (Non-Captured)</td>
<td>NA</td>
</tr>
<tr>
<td>YRD-49</td>
<td>EUYRD-49</td>
<td>Grain Storage Tank</td>
<td>95-A-241-S2</td>
</tr>
<tr>
<td>YRD-50</td>
<td>EUYRD-50</td>
<td>Grain Storage Tank</td>
<td>NA</td>
</tr>
<tr>
<td>6-49</td>
<td>EU6-49</td>
<td>Offal Transport</td>
<td>94-A-308</td>
</tr>
<tr>
<td>6-F1</td>
<td>EU6-F1</td>
<td>Offal Loadout</td>
<td>NA</td>
</tr>
<tr>
<td>93-1</td>
<td>EU93-1</td>
<td>Offal Mill</td>
<td>NA</td>
</tr>
<tr>
<td>94-1</td>
<td>EU94-1</td>
<td>Corn Screenings Transfer Line</td>
<td>05-A-394</td>
</tr>
<tr>
<td>94-2</td>
<td>EU94-2</td>
<td>Corn Screenings Storage Tank</td>
<td>05-A-395</td>
</tr>
<tr>
<td>94-3</td>
<td>EU94-3</td>
<td>Rail Car Loading Conveyor</td>
<td>05-A-396</td>
</tr>
<tr>
<td>9-1</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-2</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-3</td>
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<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-4</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-5</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-6</td>
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<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-7</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-8</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-9</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-10</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
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<td>9-11</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-12</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>9-13</td>
<td></td>
<td></td>
<td>NA</td>
</tr>
<tr>
<td>EUB-9</td>
<td></td>
<td>Fugitive Emission - Corn Wet Milling</td>
<td>NA</td>
</tr>
</tbody>
</table>
Emission Point ID Numbers: 1-1, 1-2, 1-3, 1-4

## Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>EU1-1</td>
<td>Rail Receiving No. 1</td>
<td>CE1-1: Baghouse</td>
<td>Corn</td>
<td>700 tons/hr.</td>
<td>94-A-307-S2</td>
</tr>
<tr>
<td>1-2</td>
<td>EU1-2</td>
<td>Rail Receiving No. 2</td>
<td>CE1-2: Baghouse</td>
<td>Corn</td>
<td>700 tons/hr.</td>
<td>05-A-390</td>
</tr>
<tr>
<td>1-3</td>
<td>EU1-3</td>
<td>Grain Handling/Cleaning No.1</td>
<td>CE1-3: Baghouse</td>
<td>Corn</td>
<td>500 tons/hr.</td>
<td>05-A-391-S1</td>
</tr>
<tr>
<td>1-4</td>
<td>EU1-4</td>
<td>Grain Handling/Cleaning</td>
<td>CE1-4: Baghouse</td>
<td>Corn</td>
<td>500 tons/hr.</td>
<td>05-A-392</td>
</tr>
</tbody>
</table>

## Applicable Requirements

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

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

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Opacity</th>
<th>PM-10</th>
<th>Particulate Matter</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>40%</td>
<td>1.24 lb/hr</td>
<td>0.1 gr/dscf</td>
<td>94-A-307-S2, 567 IAC 23.3(2)&quot;d&quot;, 23.4(7)</td>
</tr>
<tr>
<td>1-2</td>
<td>40%</td>
<td>1.24 lb/hr</td>
<td>0.1 gr/dscf</td>
<td>05-A-390, 567 IAC 23.3(2)&quot;d&quot;, 23.4(7)</td>
</tr>
<tr>
<td>1-3</td>
<td>40%</td>
<td>1.54 lb/hr</td>
<td>0.1 gr/dscf</td>
<td>05-A-391-S1, 567 IAC 23.3(2)&quot;d&quot;, 23.4(7)</td>
</tr>
<tr>
<td>1-4</td>
<td>40%</td>
<td>1.24 lb/hr</td>
<td>0.1 gr/dscf</td>
<td>05-A-392, 567 IAC 23.3(2)&quot;d&quot;, 23.4(7)</td>
</tr>
</tbody>
</table>

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

(2) Standard is expressed as the average of 3 runs.
**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height (ft. from ground)</th>
<th>Stack Opening (inches, dia.)</th>
<th>Exhaust Flow Rate (scfm)</th>
<th>Exhaust Temperature (F)</th>
<th>Discharge Type</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>132</td>
<td>20</td>
<td>15,000</td>
<td>70</td>
<td>Vertical Unobstructed</td>
<td>94-A-307-S2</td>
</tr>
<tr>
<td>1-2</td>
<td>132</td>
<td>20</td>
<td>15,000</td>
<td>70</td>
<td>Vertical Unobstructed</td>
<td>05-A-390</td>
</tr>
<tr>
<td>1-3</td>
<td>132</td>
<td>30</td>
<td>18,000</td>
<td>70</td>
<td>Vertical Unobstructed</td>
<td>05-A-391-S1</td>
</tr>
<tr>
<td>1-4</td>
<td>132</td>
<td>20</td>
<td>15,000</td>
<td>70</td>
<td>Vertical Unobstructed</td>
<td>05-A-392</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing: EP 1-3**

Pollutant – PM-10

Stack Test to be Completed by - December 5, 2008

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

Authority for Requirement - 567 IAC 22.108(3)

* Or approved alternative.

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

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

Yes ☐  No ☒

**Facility Maintained Operation & Maintenance Plan Required?**

(Required for CE1-1, CE1-2, CE1-3, and CE1-4)

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: B-15

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU15-1</td>
<td>No. 1 Corn Truck Dump CE15-1: Baghouse</td>
<td>Corn</td>
<td>600 tons/hr.</td>
<td></td>
</tr>
<tr>
<td>EU15-2</td>
<td>No. 2 Corn Truck Dump CE 15-2: Baghouse</td>
<td>Corn</td>
<td>600 tons/hr.</td>
<td></td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %⁽¹⁾
Authority for Requirement: Iowa DNR Construction Permit 94-A-592-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.98 lb/hr.⁽²⁾
Authority for Requirement: Iowa DNR Construction Permit 94-A-592-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-592-S1
567 IAC 23.4(7)

⁽¹⁾ Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs

**Operational Limits & Requirements**

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

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

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

Authority for Requirement: Iowa DNR Construction Permit 94-A-592-S1

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

Stack Height, (ft, from the ground): 120
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 46,000
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-592-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing:**
- Pollutant – Particulate Matter
- Stack Test to be Completed by - December 5, 2008
- Test Method – Iowa Compliance Sampling Manual Method 5
- Authority for Requirement - 567 IAC 22.108(3)

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

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

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☒ No ☐
*(Required for CE15-1 and CE15-2)*

**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: 15-F1**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-F1</td>
<td>EU15-F1</td>
<td>Truck Unloading (Non-Captured)</td>
<td>NA</td>
<td>Corn</td>
<td>1200 tons/hr.</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

*The emissions from these emission points 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/scf  
Authority for Requirement: 567 IAC 23.4(7)

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: 15-F2**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-F2</td>
<td>EU15-F2</td>
<td>Rail Unloading (Non-Captured)</td>
<td>NA</td>
<td>Corn</td>
<td>700 tons/hr.</td>
</tr>
</tbody>
</table>

**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.

Pollutant: Fugitive Dust

Emission Limit: No person shall allow, cause or permit any materials to be handled, transported or stored; or a building, its appurtenances or a construction haul road to be used, constructed, altered, repaired or demolished, without taking reasonable precautions to prevent a nuisance. All persons shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate.

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

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: YRD-49**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-49</td>
<td>Grain Storage Tank</td>
<td>NA</td>
<td>Corn</td>
<td>243,160 bushels</td>
</tr>
</tbody>
</table>

**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:** PM-10
  - Emission Limit(s): 0.71 lb/hr., 3.12 tons/yr.
  - Authority for Requirement: Iowa DNR Construction Permit 95-A-241-S2

- **Pollutant:** Particulate Matter
  - Emission Limit(s): 0.71 lb/hr., 3.12 tons/yr.
  - Authority for Requirement: Iowa DNR Construction Permit 95-A-241-S2

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- **Stack Height, (ft, from the ground):** 120
- **Stack Opening, (inches, dia.):** 60*
- **Exhaust Flow Rate (scfm):** 830
- **Exhaust Temperature (°F):** 70

*Construction permit 95-A-241-S2 lists the stack diameter as 6 inches, however, the correct diameter is 60 inches. The facility shall apply for a construction permit modification to correct this.*

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

- **Agency Approved Operation & Maintenance Plan Required?**  
  Yes [ ] No [x]

- **Facility Maintained Operation & Maintenance Plan Required?**  
  Yes [ ] No [x]

- **Compliance Assurance Monitoring (CAM) Plan Required?**  
  Yes [ ] No [x]

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-50

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-50</td>
<td>Grain Storage Tank</td>
<td>NA</td>
<td>Corn</td>
<td>233,946 bushels</td>
</tr>
</tbody>
</table>

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/scf
Authority for Requirement: 567 IAC 23.4(7)

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
**Emission Point ID Number: 6-49**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU6-49</td>
<td>Offal Transport</td>
<td>CE6-49: Baghouse</td>
<td>Offal</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

**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): 5 %  
Authority for Requirement: Iowa DNR Construction Permit 94-A-308  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.197 lb/hr., 0.86 tons/yr., 0.01 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 94-A-308

Pollutant: Particulate Matter  
Emission Limit(s): 0.1 gr/scf  
Authority for Requirement: 567 IAC 23.4(7)

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 54  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (scfm): 2300  
Exhaust Temperature (°F): 70  
Authority for Requirement: Iowa DNR Construction Permit 94-A-308

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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: 6-F1**

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU6-F1</td>
<td>Offal Loadout</td>
<td>NA</td>
<td>Offal</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

### Applicable Requirements

**Emission Limits (lb./hr, gr./scf, 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/scf  
  Authority for Requirement: 567 IAC 23.4(7)

### Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  93-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU93-1</td>
<td>Offal Milling</td>
<td>CE93-1: Dust Collector</td>
<td>Offal</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

* This unit is scheduled to be removed from the facility and replaced by the Corn Screenings System (EP’s 94-1, 94-2, and 94-3) which are included in this permit.

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/scf
Authority for Requirement: 567 IAC 23.4(7)

Monitoring Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 94-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU94-1</td>
<td>Corn Screenings Transfer Line</td>
<td>CE94-1: Dust Collector</td>
<td>Corn Screenings</td>
<td>500 lb/minute</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-394
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.13 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-394

Pollutant: Particulate Matter
Emission Limit(s): 0.13 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 05-A-394
567 IAC 23.3(2)"a"

\(^{(1)}\) An exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).
\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 77  
Stack Opening, (inches, dia.): 14  
Exhaust Flow Rate (scfm): 1500  
Exhaust Temperature (°F): Ambient  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-394

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 94-2**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU94-2</td>
<td>Corn Screenings Storage Tank</td>
<td>CE94-2: Dust Collector</td>
<td>Corn Screenings</td>
<td>8,000 bushels</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-395
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.04 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-395

Pollutant: Particulate Matter
Emission Limit(s): 0.04 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 05-A-395
567 IAC 23.3(2)"a"

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

\(^{(2)}\) Standard is expressed as the average of 3 runs
**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): 450  
Exhaust Temperature (°F): Ambient  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-395

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 94-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU94-3</td>
<td>Rail Car Loading Conveyor</td>
<td>CE94-3: Dust Collector</td>
<td>Corn Screenings</td>
<td>4,000 bushels/hr.</td>
</tr>
</tbody>
</table>

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 %<sup>(1)</sup>
Authority for Requirement: Iowa DNR Construction Permit 05-A-396
567 IAC 23.3(2)d"

Pollutant: PM-10
Emission Limit(s): 0.17 lb/hr.<sup>(2)</sup>
Authority for Requirement: Iowa DNR Construction Permit 05-A-396

Pollutant: Particulate Matter
Emission Limit(s): 0.17 lb/hr.<sup>(2)</sup>, 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 05-A-396
567 IAC 23.3(2)a"

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

<sup>(2)</sup> Standard is expressed as the average of 3 runs
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 77  
Stack Opening, (inches, dia.): 14  
Exhaust Flow Rate (scfm): 2000  
Exhaust Temperature (°F): Ambient  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-396

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒  
Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐  
Compliance Assurance Monitoring (CAM) Plan Required? Yes ☐ No ☒  
Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  9-1, 9-2, 9-3, 9-4, 9-5, 9-6, 9-7, 9-8, 9-9, 9-10, 9-11, 9-12, 9-13

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUB9</td>
<td>Building 9 – Starch Separation</td>
<td>NA</td>
<td>Non-Captured SO$_2$</td>
<td>NA</td>
</tr>
</tbody>
</table>

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:  Sulfur Dioxide (SO$_2$)  
Emission Limit(s):  500 ppmv  
Authority for Requirement:  567 IAC 23.3(3)"e"

**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)
## Oilhouse Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>217-17</td>
<td>EU217-17</td>
<td>Clay Transport</td>
<td>94-A-284</td>
</tr>
<tr>
<td>36-19</td>
<td>EU36-19A</td>
<td>D.T. Dryer No. 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19B</td>
<td>D.T. Cooler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19C</td>
<td>D.T. Cooler No. 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19D</td>
<td>No. 1 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19E</td>
<td>No. 2 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19G</td>
<td>No. 4 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19H</td>
<td>No. 5 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19I</td>
<td>No. 6 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19J</td>
<td>No. 1 Expander</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19K</td>
<td>No. 2 Expander</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19L</td>
<td>No. 3 Expander</td>
<td>94-A-282-S4</td>
</tr>
<tr>
<td></td>
<td>EU36-19M</td>
<td>No. 1 Aspirator</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19N</td>
<td>No. 7 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19O</td>
<td>No. 4 Expander</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19Q</td>
<td>No. 8 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19R</td>
<td>No. 9 Flaking Roll</td>
<td></td>
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<td></td>
<td>EU36-19S</td>
<td>No. 10 Flaking Roll</td>
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</tr>
<tr>
<td></td>
<td>EU36-19T</td>
<td>No. 11 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-19U</td>
<td>No. 12 Flaking Roll</td>
<td></td>
</tr>
<tr>
<td>36-20</td>
<td>EU36-20A</td>
<td>No. 1 Leader Dryer</td>
<td>94-A-283-S2</td>
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<tr>
<td></td>
<td>EU36-20B</td>
<td>No. 2 Leader Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20C</td>
<td>Leader Cooler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20F</td>
<td>No. 1 Expelled Cake Conveyor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20G</td>
<td>No. 2 Expelled Cake Conveyor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20H</td>
<td>No. 1 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20I</td>
<td>No. 2 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20J</td>
<td>No. 3 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20O</td>
<td>No. 8 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20P</td>
<td>No. 9 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20Q</td>
<td>No. 10 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20V</td>
<td>Hotwell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20W</td>
<td>Misc. Meal Prep.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20X</td>
<td>No. 11 Expeller</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU36-20Y</td>
<td>No. 12 Expeller</td>
<td></td>
</tr>
<tr>
<td>36-21</td>
<td>EU36-21</td>
<td>Clay Transfer To Day Bins</td>
<td>94-A-285</td>
</tr>
<tr>
<td>36-22</td>
<td>EU36-22</td>
<td>Filter Aid Pneumatic Transport</td>
<td>94-A-286</td>
</tr>
<tr>
<td>36-24</td>
<td>EU36-24</td>
<td>Oil Refining Boiler</td>
<td>06-A-047</td>
</tr>
<tr>
<td>36-25</td>
<td>EU36-25</td>
<td>Geka Oil Refining Boiler</td>
<td>NA</td>
</tr>
<tr>
<td>57-F3</td>
<td>EU57-F3</td>
<td>Germ Rail And Truck Unloading</td>
<td>NA</td>
</tr>
<tr>
<td>66-F1</td>
<td>EU66-F1</td>
<td>Oilhouse Process Hexane Usage</td>
<td>NA</td>
</tr>
</tbody>
</table>
Emission Point ID Number: 217-17

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU217-17</td>
<td>Clay Transport</td>
<td>CE217-17: Baghouse</td>
<td>Clay</td>
<td>208,750 lbs.</td>
</tr>
</tbody>
</table>

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):** 5 %
  - **Authority for Requirement:** Iowa DNR Construction Permit 94-A-284
    567 IAC 23.3(2)"d"

- **Pollutant:** PM-10
  - **Emission Limit(s):** 0.06 lb/hr., 0.26 tons/yr., 0.01 gr/dscf
  - **Authority for Requirement:** Iowa DNR Construction Permit 94-A-284

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- **Stack Height, (ft, from the ground):** 65
- **Stack Opening, (inches.):** 4 x 10
- **Exhaust Flow Rate (scfm):** 700
- **Exhaust Temperature (°F):** 70
- **Authority for Requirement:** Iowa DNR Construction Permit 94-A-284

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**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: 36-19**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-19A</td>
<td>D.T. Dryer No. 1</td>
<td></td>
<td>Meal</td>
<td>1000 tons/day</td>
</tr>
<tr>
<td>EU36-19B</td>
<td>D.T. Cooler</td>
<td></td>
<td>Meal</td>
<td>1000 tons/day</td>
</tr>
<tr>
<td>EU36-19C</td>
<td>D.T. Dryer No. 2</td>
<td></td>
<td>Meal</td>
<td>83.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19D</td>
<td>No. 1 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU36-19E</td>
<td>No. 2 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU36-19G</td>
<td>No. 4 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU36-19H</td>
<td>No. 5 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU36-19I</td>
<td>No. 6 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19J</td>
<td>No. 1 Expander</td>
<td></td>
<td>Germ</td>
<td>30 tons/hr</td>
</tr>
<tr>
<td>EU36-19K</td>
<td>No. 2 Expander</td>
<td></td>
<td>Germ</td>
<td>30 tons/hr</td>
</tr>
<tr>
<td>EU36-19L</td>
<td>No. 3 Expander</td>
<td></td>
<td>Germ</td>
<td>30 tons/hr</td>
</tr>
<tr>
<td>EU36-19M</td>
<td>No. 1 Aspirator</td>
<td></td>
<td>Germ</td>
<td>1320 tons/day</td>
</tr>
<tr>
<td>EU36-19N</td>
<td>No. 7 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19O</td>
<td>No. 4 Expander</td>
<td></td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU36-19Q</td>
<td>No. 8 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19R</td>
<td>No. 9 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19S</td>
<td>No. 10 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19T</td>
<td>No. 11 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
<tr>
<td>EU36-19U</td>
<td>No. 12 Flaking Roll</td>
<td></td>
<td>Germ</td>
<td>8.33 tons/hr.</td>
</tr>
</tbody>
</table>

CE36-19: Gas Scrubber
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: Iowa DNR Construction Permit 94-A-282-S4
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.2 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4

Pollutant: Particulate Matter
Emission Limit(s): 1.2 lb/hr., 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO2)
Emission Limit(s): 0.15 lb/hr., 0.66 tons/yr., 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 72.09 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs

(3) Standard is a 12-month rolling total.
**Operational Limits & Requirements**
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Control equipment parameters:
1. The control equipment shall be inspected and maintained according to manufacturer’s specifications.
2. The facility shall determine the appropriate limits on scrubnant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*
1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubnant flow rate and pressure drop for the scrubbers.

Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4

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

Stack Height, (ft, from the ground): 90
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (scfm): 44,000
Exhaust Temperature (°F): 100
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-282-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing:**
- Pollutant – PM-10
- Stack Test to be Completed by - December 5, 2008
- Test Method – 40 CFR 51, Appendix M, 201A with 202*
- Authority for Requirement - 567 IAC 22.108(3)

* Or approved alternative.
Pollutant – Particulate Matter
Stack Test to be Completed by - Within two (2) years of permit issuance.
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

Pollutant – VOC’s
Stack Test to be Completed by - Within two (2) years of permit issuance.
Test Method – 40 CFR 60, Appendix A, Method 25A
Authority for Requirement - 567 IAC 22.108(3)

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

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

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: 36-20

#### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-20A</td>
<td>Germ Conditioner Dryer #1</td>
<td></td>
<td>Germ</td>
<td>1650 tons/day</td>
</tr>
<tr>
<td>EU36-20B</td>
<td>Germ Conditioner Dryer #2</td>
<td></td>
<td>Germ</td>
<td>1650 tons/day</td>
</tr>
<tr>
<td>EU36-20C</td>
<td>Leader Cooler</td>
<td></td>
<td>Germ</td>
<td>1650 tons/day</td>
</tr>
<tr>
<td>EU36-20F</td>
<td>No. 1 Expelled Cake Conveyor</td>
<td></td>
<td>Meal</td>
<td>450 tons/day</td>
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<tr>
<td>EU36-20G</td>
<td>No. 2 Expelled Cake Conveyor</td>
<td></td>
<td>Meal</td>
<td>1250 tons/day</td>
</tr>
<tr>
<td>EU36-20H</td>
<td>No. 1 Expeller</td>
<td></td>
<td>Germ</td>
<td>150 tons/hr.</td>
</tr>
<tr>
<td>EU36-20I</td>
<td>No. 2 Expeller</td>
<td></td>
<td>Germ</td>
<td>150 tons/day</td>
</tr>
<tr>
<td>EU36-20J</td>
<td>No. 3 Expeller</td>
<td></td>
<td>Germ</td>
<td>150 tons/day</td>
</tr>
<tr>
<td>EU36-20O</td>
<td>No. 8 Expeller</td>
<td></td>
<td>Germ</td>
<td>150 tons/day</td>
</tr>
<tr>
<td>EU36-20P</td>
<td>No. 9 Expeller</td>
<td></td>
<td>Germ</td>
<td>150 tons/day</td>
</tr>
<tr>
<td>EU36-20Q</td>
<td>No. 10 Expeller</td>
<td></td>
<td>Germ</td>
<td>15 tons/day</td>
</tr>
<tr>
<td>EU14-12A</td>
<td>No. 1 Sharple</td>
<td></td>
<td>Germ</td>
<td>20.83 tons/hr.</td>
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<tr>
<td>EU14-12B</td>
<td>No. 2 Sharple</td>
<td></td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU14-12C</td>
<td>No. 3 Sharple</td>
<td></td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU14-12D</td>
<td>No. 4 Sharple</td>
<td></td>
<td>Germ</td>
<td>14.58 tons/hr.</td>
</tr>
<tr>
<td>EU36-20V</td>
<td>Hotwell</td>
<td></td>
<td>Germ</td>
<td>180,000 lbs/day (water)</td>
</tr>
<tr>
<td>EU36-20W</td>
<td>DeWax Chill Tank</td>
<td></td>
<td>Meal</td>
<td>60,000 lbs/hr.</td>
</tr>
<tr>
<td>EU36-20X</td>
<td>No. 11 Expeller</td>
<td></td>
<td>Germ</td>
<td>375 tons/day</td>
</tr>
<tr>
<td>EU36-20Y</td>
<td>No. 12 Expeller</td>
<td></td>
<td>Germ</td>
<td>375 tons/day</td>
</tr>
</tbody>
</table>
**Applicable Requirements**

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.2 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3

Pollutant: Particulate Matter
Emission Limit(s): 1.2 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3
567 IAC 23.3(2)"a"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.50 lb/hr.\(^{(2)}\), 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 16.44 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
3. The control equipment shall be inspected and maintained according to manufacturer’s specifications.
4. The facility shall determine the appropriate limits on scrubant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubant flow rate and pressure drop for the scrubbers.

Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3

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

Stack Height, (ft, from the ground): 90
Stack Opening, (inches, dia.): 48
Exhaust Flow Rate (acfm): 23,855
Exhaust Temperature (°F): 110
Discharge Type: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-283-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements

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

Stack Testing Completed:

Pollutant – Opacity
Stack Test Completed - April 17-18, 2006
Test Method – 40 CFR 60, Appendix A, Method 9
Authority for Requirement - Iowa DNR Construction Permit 94-A-283-S3

Pollutant – PM-10/Particulate Matter
Stack Test Completed - April 17-18, 2006
Result Concentration – 0.003 gr/scf
Result Emission Rate – 0.95 lb/hr.
Test Method – 40 CFR 51, Appendix M, 201A with 202
Authority for Requirement - Iowa DNR Construction Permit 94-A-283-S3

Pollutant – VOC's\(^{(1)}\)
Stack Test Completed - April 17-18, 2006
Result Emission Rate – 5.7 lb/hr.
Test Method – Iowa DNR Approved Method
Authority for Requirement – Iowa DNR Construction Permit 94-A-283-S3

Stack Testing:

Pollutant – Sulfur Dioxide (SO\(_2\))
Stack Test to be Completed by - December 5, 2008
Test Method – 40 CFR 60, Appendix A, Method 6C
Authority for Requirement - 567 IAC 22.108(3)

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

Agency Approved Operation & Maintenance Plan Required?  Yes  ☑  No  ☐

Facility Maintained Operation & Maintenance Plan Required?  Yes  ☐  No  ☑

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

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Number: 36-21

#### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-21</td>
<td>Clay Transfer To Day Bins</td>
<td>CE36-21: Baghouse</td>
<td>Clay</td>
<td>10 tons/hr.</td>
</tr>
</tbody>
</table>

#### 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): 5 %  
Authority for Requirement: Iowa DNR Construction Permit 94-A-285  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.017 lb/hr., 0.075 tons/yr., 0.01 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 94-A-285

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 74-75  
Stack Opening, (inches): 4 x 10  
Exhaust Flow Rate (scfm): 200  
Exhaust Temperature (°F): 70  
Authority for Requirement: Iowa DNR Construction Permit 94-A-285

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**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: 36-22

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-22</td>
<td>Filter Aid Pneumatic Transport</td>
<td>CE36-22: Baghouse</td>
<td>Filter Aid</td>
<td>5 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5%
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-286
    - 567 IAC 23.3(2)"d"

- **Pollutant: PM-10**
  - Emission Limit(s): 0.025 lb/hr., 0.11 tons/yr., 0.01 gr/dscf
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-286

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- **Stack Height, (ft, from the ground):** 74.75
- **Stack Opening, (inches):** 10 x 4
- **Exhaust Flow Rate (scfm):** 300
- **Exhaust Temperature (°F):** 70
- Authority for Requirement: Iowa DNR Construction Permit 94-A-286

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**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: 36-24

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-24</td>
<td>Oil Refining Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>26 MMBtu/hr</td>
<td>06-A-047</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit(s): 40 %\(^{(1)}\)  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.24 lb/hr\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047

Pollutant: Particulate Matter  
Emission Limit(s): 0.24 lb/hr\(^{(2)}\), 0.6 lb/MMBtu  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047  
567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO\(_2\))  
Emission Limit(s): 0.02 lb/hr\(^{(2)}\), 500 ppmv  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047  
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NO\(_x\))  
Emission Limit(s): 3.19 lb/hr\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047

Pollutant: Volatile Organic Compounds (VOC's)  
Emission Limit(s): 0.18 lb/hr\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047

Pollutant: Carbon Monoxide (CO)  
Emission Limit(s): 2.68 lb/hr\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 06-A-047
(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, if visible emissions are observed other than start-up, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

(2) Standard is expressed as the average of 3 runs.

**Operational Limits & Requirements**

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

**Reporting & Record keeping:**

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

1. The permittee shall maintain records of monthly fuel use by the boiler, EU36-24, including the type of fuel and amount according to the reduced recordkeeping requirements for NSPS Subpart Dc.
2. Retain a certified statement signed by the owner or operator of the affected source that the records of fuel supplier certifications represent all of the fuel combusted during the reporting period.
3. The permittee shall follow the reporting requirements of 40 CFR §60.48c.
4. Per the reduced recordkeeping for NSPS Subpart Dc the facility shall provide a report of excess emissions (or lack thereof) according to 40 CFR §60.48c(c) on an annual basis when burning only natural gas. The facility is also required to notify the DNR field office of excess emissions within 8 hours and submit a written report within 7 days.

Authority for Requirement: Iowa DNR Construction Permit 06-A-047

567 IAC 23.1(2)"III"

40 CFR 60 Subpart Dc

**NESHAP:**

These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

567 IAC 23.1(4)"dd"
Emission Point Characteristics
The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 120
Stack Opening, (inches, dia.): 30
Exhaust Flow Rate (scfm): 3,750
Exhaust Temperature (°F): 388
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 06-A-047

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 36-25

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU36-25</td>
<td>Geka Oil Refining Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>8 MMBtu/hr.</td>
</tr>
</tbody>
</table>

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): 0.6 lb/MMBtu
  - Authority for Requirement: 567 IAC 23.3(2)"b"

- **Pollutant:** Sulfur Dioxide (SO₂)
  - Emission Limit(s): 500 ppmv
  - Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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

  - This boiler is subject to 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to 40 CFR 63.7506(c), existing small gaseous fueled boilers are not subject to the initial notification requirements in 63.9(b) and are not subject to any requirements in Subparts DDDDD or A of 40 CFR 63

  Authority for Requirement: 40 CFR 63 Subparts DDDDD and A 567 IAC 23.1(4)"dd"
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 57-F3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU57-F3</td>
<td>Germ Rail/Truck Unloading</td>
<td>NA</td>
<td>Germ</td>
<td>100 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

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

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 66A-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU66A-1</td>
<td>Mineral Oil System</td>
<td>NA</td>
<td>Germ</td>
<td>83.3 tons/hr.</td>
</tr>
</tbody>
</table>

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 %<sup>(1)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 95-A-203-S2  
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter  
Emission Limit(s): 0.1 gr/scf  
Authority for Requirement: Iowa DNR Construction Permit 95-A-203-S2  
567 IAC 23.3(2)"a"

Pollutant: VOC's  
Emission Limit(s): 9.6 tons/yr.<sup>(2)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 95-A-203-S2

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

<sup>(2)</sup> Standard is a 12-month rolling total
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 55  
Stack Opening, (inches, dia.): 4  
Exhaust Flow Rate (scfm): 100  
Discharge Type: Vertical, Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 95-A-203-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☑

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 66-F1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU66-F1</td>
<td>Oilhouse Process Hexane Usage</td>
<td>NA</td>
<td>Hexane</td>
<td>44.17 gallons/hr.</td>
</tr>
</tbody>
</table>

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.

The applicable emission limits for this process are included in the Operational Limits and Requirement section below.

Operational Limits & Requirements

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

This unit is subject to 40 CFR Part 63 Subpart GGGG - National Emission Standards for Solvent Extraction for Vegetable Oil Production and Subpart A – General Provisions. Below is a summary of those requirements.

- **Note:** For consistency purposes, citations are consistent with the CFR.
- This facility is considered an "existing source" as defined by this subpart.

Standards

§ 63.2840 What emission requirements must I meet?

For each facility meeting the applicability criteria in Sec. 63.2832, you must comply with either the requirements specified in paragraphs (a) through (d), or the requirements in paragraph (e) of this section.

(a) (1) The emission requirements limit the number of gallons of HAP lost per ton of listed oilseeds processed. For each operating month, you must calculate a compliance ratio which compares your actual HAP loss to your allowable HAP loss for the previous 12 operating months as shown in Equation 1 of this section. An operating month, as defined in § 63.2872, is any calendar month in which a source processes a listed oilseed, excluding any entire calendar month in which the source operated under an initial startup period subject to § 63.2850(c)(2) or (d)(2) or a malfunction period subject to § 63.2850(e)(2). Equation 1 of this section follows:

\[
\text{Compliance Ratio} = \frac{\text{Actual HAP Loss}}{\text{Allowable HAP Loss}}
\]  
(Eq. 1)
(2) Equation 1 of this section can also be expressed as a function of total solvent loss as shown in Equation 2 of this section. Equation 2 of this section follows:

\[
\text{Compliance Ratio} = \frac{f \times \text{Actual Solvent Loss}}{0.64 \times \sum_{i=1}^{n} ((\text{Oilseed}_i \times (\text{SLF}_i)))}
\]  

(Eq. 2)

Where:

- \(f\) = The weighted average volume fraction of HAP in solvent received during the previous 12 operating months, as determined in § 63.2854, dimensionless.
- 0.64 = The average volume fraction of HAP in solvent in the baseline performance data, dimensionless.
- Actual Solvent Loss = Gallons of actual solvent loss during previous 12 operating months, as determined in § 63.2853.
- Oilseed = Tons of each oilseed type ‘‘i’’ processed during the previous 12 operating months, as shown in § 63.2855.
- SLF = The corresponding solvent loss factor (gal/ton) for oilseed ‘‘i’’ listed in Table 1 of this section, as follows:
### TABLE 1 OF § 63.2840. - OILSEED SOLVENT LOSS FACTORS FOR DETERMINING ALLOWABLE HAP LOSS

<table>
<thead>
<tr>
<th>Type of oilseed process</th>
<th>A source that</th>
<th>Existing sources</th>
<th>New sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Corn Germ, Wet Milling</td>
<td>processes corn germ that has been separated from other corn components using a &quot;wet&quot; process of centrifuging a slurry steeped in a dilute sulfurous acid solution.</td>
<td>0.4</td>
<td>0.3</td>
</tr>
<tr>
<td>(ii) Corn Germ, Dry Milling</td>
<td>processes corn germ that has been separated from the other corn components using a &quot;dry&quot; process of mechanical chafing and air sifting.</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>(iii) Cottonseed, Large</td>
<td>processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.</td>
<td>0.5</td>
<td>0.4</td>
</tr>
<tr>
<td>(iv) Cottonseed, Small</td>
<td>processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 month period.</td>
<td>0.7</td>
<td>0.4</td>
</tr>
<tr>
<td>(v) Flax</td>
<td>processes flax.</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>(vi) Peanuts</td>
<td>processes peanuts</td>
<td>1.2</td>
<td>0.7</td>
</tr>
<tr>
<td>(vii) Rapeseed</td>
<td>processes rapeseed</td>
<td>0.7</td>
<td>0.3</td>
</tr>
<tr>
<td>(viii) Safflower</td>
<td>processes safflower</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>(ix) Soybean, Conventional</td>
<td>uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>(x) Soybean, Speciality</td>
<td>uses a special style desolventizer to produce soybean meal products for human and animal consumption.</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>(xi) Soybean, Combination Plant with Low Speciality Production.</td>
<td>processes soybeans in both speciality and conventional desolventizers and the quality of soybeans processed in speciality desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed...</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>(xii) Sunflower</td>
<td>processes sunflower</td>
<td>0.4</td>
<td>0.3</td>
</tr>
</tbody>
</table>
(b) When your source has processed listed oilseed for 12 operating months, calculate the compliance ratio by the end of each calendar month following an operating month using Equation 2 of this section. When calculating your compliance ratio, consider the conditions and exclusions in paragraphs (b)(1) through (6) of this section:

(1) If your source processes any quantity of listed oilseeds in a calendar month and the source is not operating under an initial startup period or malfunction period subject to § 63.2850, then you must categorize the month as an operating month, as defined in § 63.2872.

(2) The 12-month compliance ratio may include operating months occurring prior to a source shutdown and operating months that follow after the source resumes operation.

(3) If your source shuts down and processes no listed oilseed for an entire calendar month, then you must categorize the month as a nonoperating month, as defined in § 63.2872. Exclude any nonoperating months from the compliance ratio determination.

(4) If your source is subject to an initial startup period as defined in § 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the initial startup period.

(5) If your source is subject to a malfunction period as defined in § 63.2872, exclude from the compliance ratio determination any solvent and oilseed information recorded for the malfunction period.

(6) For sources processing cottonseed or specialty soybean, the solvent loss factor you use to determine the compliance ratio may change each operating month depending on the tons of oilseed processed during all normal operating periods in a 12 operating month period.

(c) If the compliance ratio is less than or equal to 1.00, your source was in compliance with the HAP emission requirements for the previous operating month.

(d) To determine the compliance ratio in Equation 2 of this section, you must select the appropriate oilseed solvent loss factor from Table 1 of this section. First, determine whether your source is new or existing using Table 1 of § 63.2833. Then, under the appropriate existing or new source column, select the oilseed solvent loss factor that corresponds to each type oilseed or process operation for each operating month.

(e) Low-HAP solvent option. For all vegetable oil production processes subject to this subpart, you must exclusively use solvent where the volume fraction of each HAP comprises 1 percent or less by volume of the solvent (low-HAP solvent) in each delivery, and you must meet the requirements in paragraphs (e)(1) through (5) of this section. Your vegetable oil production process is not subject to the requirements in Sec. Sec. 63.2850 through 63.2870 unless specifically referenced in paragraphs (e)(1) through (5) of this section.

(1) You shall determine the HAP content of your solvent in accordance with the specifications in Sec. 63.2854(b)(1).

(2) You shall maintain documentation of the HAP content determination for each delivery of the solvent at the facility at all times.

(3) You must submit an initial notification for existing sources in accordance with Sec. 63.2860(a).

(4) You must submit an initial notification for new and reconstructed sources in accordance with Sec. 63.2860(b).

(5) You must submit an annual compliance certification in accordance with Sec. 63.2861(a). The certification should only include the information required under Sec.
63.2861(a)(1) and (2), and a certification indicating whether the source complied with all of the requirements in paragraph (e) of this section.

(f) You may change compliance options for your source if you submit a notice to the Administrator at least 60 days prior to changing compliance options. If your source changes from the low-HAP solvent option to the compliance ratio determination option, you must determine the compliance ratio for the most recent 12 operating months beginning with the first month after changing compliance options.

**Compliance Requirements**

§ 63.2850 How do I comply with the hazardous air pollutant emission standards?

(a) General requirements. The requirements in paragraphs (a)(1)(i) through (iv) of this section apply to all affected sources:

1. Submit the necessary notifications in accordance with § 63.2860, which include:
   (i) Initial notifications for existing sources.
   (ii) Initial notifications for new and reconstructed sources.
   (iii) Initial notifications for significant modifications to existing or new sources.
   (iv) Notification of compliance status.

2. Develop and implement a plan for demonstrating compliance in accordance with § 63.2851.

3. Develop a written startup, shutdown and malfunction (SSM) plan in accordance with the provisions in § 63.2852.

4. Maintain all the necessary records you have used to demonstrate compliance with this subpart in accordance with § 63.2862.

5. Submit the reports in paragraphs (a)(5)(i) through (iii) of this section:
   (i) Annual compliance certifications in accordance with § 63.2861(a).
   (ii) Periodic SSM reports in accordance with § 63.2861(c).
   (iii) Immediate SSM reports in accordance with § 63.2861(d).

6. Submit all notifications and reports and maintain all records required by the General Provisions for performance testing if you add a control device that destroys solvent.

(b) Existing sources under normal operation. You must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating compliance for existing sources under normal operation in Table 2 of this section.

(d) Existing or new sources that have been significantly modified. Your existing or new source that has been significantly modified must meet the requirements associated with one of two compliance options. Within 15 days of the modified source startup date, you must choose to comply with one of the options listed in paragraph (d)(1) or (2) of this section:

1. Normal operation. Upon startup of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources under normal operation, and the schedules for demonstrating
compliance for an existing or new source that has been significantly modified in Table 2 of this section.

(2) **Initial startup period.** For up to 3 calendar months after the startup date of your significantly modified existing or new source, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating under an initial startup period, and the schedules for demonstrating compliance for a significantly modified existing or new source operating under an initial startup period in Table 2 of this section. After a maximum of 3 calendar months, your new or existing source must meet all of the requirements listed in Table 1 of this section for sources under normal operation.

(e) **Existing or new sources experiencing a malfunction.** A malfunction is defined in § 63.2. In general, it means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or process equipment to function in a usual manner. If your existing or new source experiences an unscheduled shutdown as a result of a malfunction, continues to operate during a malfunction (including the period reasonably necessary to correct the malfunction), or starts up after a shutdown resulting from a malfunction, then you must meet the requirements associated with one of two compliance options. Routine or scheduled process startups and shutdowns resulting from, but not limited to, market demands, maintenance activities, and switching types of oilseed processed, are not startups or shutdowns resulting from a malfunction and, therefore, do not qualify for this provision. Within 15 days of the beginning date of the malfunction, you must choose to comply with one of the options listed in paragraphs (e)(1) through (2) of this section:

(1) **Normal operation.** Your source must meet all of the requirements listed in paragraph (a) of this section and one of the options listed in paragraphs (e)(1)(i) through (iii) of this section:
   (i) Existing source normal operation requirements in paragraph (b) of this section.
   (ii) New source normal operation requirements in paragraph (c)(1) of this section.
   (iii) Normal operation requirements for sources that have been significantly modified in paragraph (d)(1) of this section.

(2) **Malfunction period.** Throughout the malfunction period, you must meet all of the requirements listed in paragraph (a) of this section and Table 1 of this section for sources operating during a malfunction period. At the end of the malfunction period, your source must then meet all of the requirements listed in Table 1 of this section for sources under normal operation. Table 1 of this section follows:

**Sec. 63.2851 What is a plan for demonstrating compliance?**

(a) You must develop and implement a written plan for demonstrating compliance that provides the detailed procedures you will follow to monitor and record data necessary for demonstrating compliance with this subpart. Procedures followed for quantifying solvent loss from the source and amount of oilseed processed vary from source to source because of site-specific factors such as equipment design characteristics and operating conditions. Typical procedures include one or more accurate measurement methods such as weigh scales, volumetric displacement, and material mass balances. Because the industry does not have a uniform set of procedures, you must develop and implement your own site-specific plan for demonstrating compliance before the compliance date for your source. You must also incorporate the plan for demonstrating compliance by reference in the source's title V permit and keep the plan on-site and readily available as long as the source is operational. If you make any changes to the plan for
demonstrating compliance, then you must keep all previous versions of the plan and make them readily available for inspection for at least 5 years after each revision. The plan for demonstrating compliance must include the items in paragraphs (a)(1) through (7) of this section:

1. The name and address of the owner or operator.
2. The physical address of the vegetable oil production process.
3. A detailed description of all methods of measurement your source will use to determine your solvent losses, HAP content of solvent, and the tons of each type of oilseed processed.
4. When each measurement will be made.
5. Examples of each calculation you will use to determine your compliance status. Include examples of how you will convert data measured with one parameter to other terms for use in compliance determination.
6. Example logs of how data will be recorded.
7. A plan to ensure that the data continue to meet compliance demonstration needs.

(b) The responsible agency of these NESHAP may require you to revise your plan for demonstrating compliance. The responsible agency may require reasonable revisions if the procedures lack detail, are inconsistent or do not accurately determine solvent loss, HAP content of the solvent, or the tons of oilseed processed.

Sec. 63.2852 What is a startup, shutdown, and malfunction plan?

You must develop a written SSM plan in accordance with Sec. 63.6(e)(3) and implement the plan, when applicable. You must complete the SSM plan before the compliance date for your source. You must also keep the SSM Plan on-site and readily available as long as the source is operational. The SSM plan provides detailed procedures for operating and maintaining your source to minimize emissions during a qualifying SSM event for which the source chooses the Sec. 63.2850(e)(2) malfunction period, or the Sec. 63.2850(c)(2) or (d)(2) initial startup period. The SSM plan must specify a program of corrective action for malfunctioning process and air pollution control equipment and reflect the best practices now in use by the industry to minimize emissions. Some or all of the procedures may come from plans you developed for other purposes such as a Standard Operating Procedure manual or an Occupational Safety and Health Administration Process Safety Management plan. To qualify as a SSM plan, other such plans must meet all the Applicable Requirements of these NESHAP.

Sec. 63.2853 How do I determine the actual solvent loss?

By the end of each calendar month following an operating month, you must determine the total solvent loss in gallons for the previous operating month. The total solvent loss for an operating month includes all solvent losses that occur during normal operating periods within the operating month. If you have determined solvent losses for 12 or more operating months, then you must also determine the 12 operating months rolling sum of actual solvent loss in gallons by summing the monthly actual solvent loss for the previous 12 operating months. The 12 operating months rolling sum of solvent loss is the “actual solvent loss,” which is used to calculate your compliance ratio as described in Sec. 63.2840.

(a) To determine the actual solvent loss from your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (7) of this section:
(1) The dates that define each operating status period during a calendar month. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If the source maintains the same operating status during an entire calendar month, these dates are the beginning and ending dates of the calendar month. If, prior to the effective date of this rule, your source determines the solvent loss on an accounting month, as defined in Sec. 63.2872, rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP.

(2) Source operating status. You must categorize the operating status of your source for each recorded time interval in accordance with criteria in Table 1 of this section, as follows:

<table>
<thead>
<tr>
<th>If during a recorded time interval...</th>
<th>then your source operating status is.....</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Your source processes any amount of listed oilseed and source is not operating under an initial startup operating period or a malfunction period subject to § 63.2850(c)(2), (d)(2), or (e)(2).</td>
<td>A normal operating period.</td>
</tr>
<tr>
<td>(ii) Your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to § 63.2850(c)(2), (d)(2), or (e)(2).</td>
<td>A nonoperating period.</td>
</tr>
<tr>
<td>(iii) You choose to operate your source under an initial startup period subject to § 63.2850(c)(2) or (d)(2).</td>
<td>An initial startup period.</td>
</tr>
<tr>
<td>(iv) You choose to operate your source under a malfunction period subject to § 63.2850(e)(2).</td>
<td>A malfunction period.</td>
</tr>
<tr>
<td>(v) Your source process agricultural products not defined as listed oilseed.</td>
<td>An exempt period.</td>
</tr>
</tbody>
</table>

(3) Measuring the beginning and ending solvent inventory. You are required to measure and record the solvent inventory on the beginning and ending dates of each normal operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in Sec. 63.2851, to determine the extraction solvent inventory, and maintain readily available records of the actual solvent loss inventory, as described in Sec. 63.2862(c)(1). In general, you must measure and record the solvent inventory only when the source is actively processing any type of agricultural product. When the source is not active, some or all of the solvent working capacity is transferred to solvent storage tanks which can artificially inflate the solvent inventory.

(4) Gallons of extraction solvent received. Record the total gallons of extraction solvent received in each shipment. For most processes, the gallons of solvent received represents purchases of delivered solvent added to the solvent storage inventory. However, if your process refines additional vegetable oil from off-site sources, recovers solvent from the off-site oil, and adds it to the on-site solvent inventory, then you must determine the quantity of recovered solvent and include it in the gallons of extraction solvent received.
(5) Solvent inventory adjustments. In some situations, solvent losses determined directly from the measured solvent inventory and quantity of solvent received is not an accurate estimate of the "actual solvent loss" for use in determining compliance ratios. In such cases, you may adjust the total solvent loss for each normal operating period as long as you provide a reasonable justification for the adjustment. Situations that may require adjustments of the total solvent loss include, but are not limited to, situations in paragraphs (a)(5)(i) and (ii) of this section:

(i) Solvent destroyed in a control device. You may use a control device to reduce solvent emissions to meet the emission standard. The use of a control device does not alter the emission limit for the source. If you use a control device that reduces solvent emissions through destruction of the solvent instead of recovery, then determine the gallons of solvent that enter the control device and are destroyed there during each normal operating period. All solvent destroyed in a control device during a normal operating period can be subtracted from the total solvent loss. Examples of destructive emission control devices include catalytic incinerators, boilers, or flares. Identify and describe, in your plan for demonstrating compliance, each type of reasonable and sound measurement method that you use to quantify the gallons of solvent entering and exiting the control device and to determine the destruction efficiency of the control device. You may use design evaluations to document the gallons of solvent destroyed or removed by the control device instead of performance testing under Sec. 63.7. The design evaluations must be based on the procedures and options described in Sec. 63.985(b)(1)(i)(A) through (C) or Sec. 63.11, as appropriate. All data, assumptions, and procedures used in such evaluations must be documented and available for inspection. If you use performance testing to determine solvent flow rate to the control device or destruction efficiency of the device, follow the procedures as outlined in Sec. 63.997(e)(1) and (2). Instead of periodic performance testing to demonstrate continued good operation of the control device, you may develop a monitoring plan, following the procedures outlined in Sec. 63.988(c) and using operational parametric measurement devices such as fan parameters, percent measurements of lower explosive limits, and combustion temperature.

(ii) Changes in solvent working capacity. In records you keep on-site, document any process modifications resulting in changes to the solvent working capacity in your vegetable oil production process. Solvent working capacity is defined in Sec. 63.2872. In general, solvent working capacity is the volume of solvent normally retained in solvent recovery equipment such as the extractor, desolventizer-toaster, solvent storage, working tanks, mineral oil absorber, condensers, and oil/solvent distillation system. If the change occurs during a normal operating period, you must determine the difference in working solvent volume and make a one-time documented adjustment to the solvent inventory.
(b) Use Equation 1 of this section to determine the actual solvent loss occurring from your affected source for all normal operating periods recorded within a calendar month. Equation 1 of this section follows:

\[
\text{Monthly Actual Solvent (gal)} = \sum_{i=1}^{n} \left( \text{SOLV}_B - \text{SOLV}_E + \text{SOLV}_R \pm \text{SOLV}_A \right) \quad (\text{Eq. 1})
\]

Where:
- \( \text{SOLV}_B \) = Gallons of solvent in the inventory at the beginning of normal operating period \( `i` \) as determined in paragraph (a)(3) of this section.
- \( \text{SOLV}_E \) = Gallons of solvent in the inventory at the end of normal operating period \( `i` \) as determined in paragraph (a)(3) of this section.
- \( \text{SOLV}_R \) = Gallons of solvent received between the beginning and ending inventory dates of normal operating period \( `i` \) as determined in paragraph (a)(4) of this section.
- \( \text{SOLV}_A \) = Gallons of solvent added or removed from the extraction solvent inventory during normal operating period \( `i` \) as determined in paragraph (a)(5) of this section.
- \( n \) = Number of normal operating periods in a calendar month.

(c) The actual solvent loss is the total solvent losses during normal operating periods for the previous 12 operating months. You determine your actual solvent loss by summing the monthly actual solvent losses for the previous 12 operating months. You must record the actual solvent loss by the end of each calendar month following an operating month. Use the actual solvent loss in Equation 2 of Sec. 63.2840 to determine the compliance ratio. Actual solvent loss does not include losses that occur during operating status periods listed in paragraphs (c)(1) through (4) of this section. If any one of these four operating status periods span an entire month, then the month is treated as nonoperating and there is no compliance ratio determination.

1. Nonoperating periods as described in paragraph (a)(2)(ii) of this section.
2. Initial startup periods as described in Sec. 63.2850(c)(2) or (d)(2).
3. Malfunction periods as described in Sec. 63.2850(e)(2).
4. Exempt operation periods as described in paragraph (a)(2)(v) of this section.

**Sec. 63.2854 How do I determine the weighted average volume fraction of HAP in the actual solvent loss?**

(a) This section describes the information and procedures you must use to determine the weighted average volume fraction of HAP in extraction solvent received for use in your vegetable oil production process. By the end of each calendar month following an operating month, determine the weighted average volume fraction of HAP in extraction solvent received since the end of the previous operating month. If you have determined the monthly weighted average volume fraction of HAP in solvent received for 12 or more operating months, then also determine an overall weighted average volume fraction of HAP in solvent received for the previous 12 operating months. Use the volume fraction of HAP determined as a 12 operating months weighted average in Equation 2 of Sec. 63.2840 to determine the compliance ratio.
(b) To determine the volume fraction of HAP in the extraction solvent determined as a 12 operating months weighted average, you must comply with paragraphs (b)(1) through (3) of this section:

(1) Record the volume fraction of each HAP comprising more than 1 percent by volume of the solvent in each delivery of solvent, including solvent recovered from off-site oil. To determine the HAP content of the material in each delivery of solvent, the reference method is EPA Method 311 of appendix A of this part. You may use EPA Method 311, an approved alternative method, or any other reasonable means for determining the HAP content. Other reasonable means of determining HAP content include, but are not limited to, a material safety data sheet or a manufacturer's certificate of analysis. A certificate of analysis is a legal and binding document provided by a solvent manufacturer. The purpose of a certificate of analysis is to list the test methods and analytical results that determine chemical properties of the solvent and the volume percentage of all HAP components present in the solvent at quantities greater than 1 percent by volume. You are not required to test the materials that you use, but the Administrator may require a test using EPA Method 311 (or an approved alternative method) to confirm the reported HAP content. However, if the results of an analysis by EPA Method 311 are different from the HAP content determined by another means, the EPA Method 311 results will govern compliance determinations.

(2) Determine the weighted average volume fraction of HAP in the extraction solvent each operating month. The weighted average volume fraction of HAP for an operating month includes all solvent received since the end of the last operating month, regardless of the operating status at the time of the delivery. Determine the monthly weighted average volume fraction of HAP by summing the products of the HAP volume fraction of each delivery and the volume of each delivery and dividing the sum by the total volume of all deliveries as expressed in Equation 1 of this section. Record the result by the end of each calendar month following an operating month. Equation 1 of this section follows:

\[
\text{Monthly Weighted Average HAP Content of Extraction Solvent} = \frac{\sum_{i=1}^{n} \text{Received}_i \times \text{Content}_i}{\text{Total Received}} \quad \text{(Eq. 1)}
\]

Where:

\(\text{Received}_i\) = Gallons of extraction solvent received in delivery \(\text{``i.'''}\)
\(\text{Content}_i\) = The volume fraction of HAP in extraction solvent delivery \(\text{``i.'''}\)
\(\text{Total Received}\) = Total gallons of extraction solvent received since the end of the previous operating month.
\(n\) = Number of extraction solvent deliveries since the end of the previous operating month.

(3) Determine the volume fraction of HAP in your extraction solvent as a 12 operating months weighted average. When your source has processed oilseed for 12 operating months, sum the products of the monthly weighted average HAP volume fraction and corresponding volume of solvent received, and divide the sum by the total volume of solvent received for the 12 operating months, as expressed by Equation 2 of this section. Record the result by the end of each calendar month following an operating month and use it in Equation 2 of Sec. 63.2840 to determine the compliance ratio. Equation 2 of this section follows:

(Eq. 2)
Where:

\[ \sum_{i=1}^{12} \frac{\text{Received}_i \times \text{Content}_i}{\text{Total Received}} \]

Received\(_i\) = Gallons of extraction solvent received in operating month "i" as determined in accordance with Sec. 63.2853(a)(4).

Content\(_i\) = Average volume fraction of HAP in extraction solvent received in operating month "i" as determined in accordance with paragraph (b)(1) of this section.

Total Received = Total gallons of extraction solvent received during the previous 12 operating months.

**Sec. 63.2855 How do I determine the quantity of oilseed processed?**

All oilseed measurements must be determined on an as received basis, as defined in Sec. 63.2872. The as received basis refers to the oilseed chemical and physical characteristics as initially received by the source and prior to any oilseed handling and processing. By the end of each calendar month following an operating month, you must determine the tons as received of each listed oilseed processed for the operating month. The total oilseed processed for an operating month includes the total of each oilseed processed during all normal operating periods that occur within the operating month. If you have determined the tons of oilseed processed for 12 or more operating months, then you must also determine the 12 operating months rolling sum of each type oilseed processed by summing the tons of each type of oilseed processed for the previous 12 operating months. The 12 operating months rolling sum of each type of oilseed processed is used to calculate the compliance ratio as described in Sec. 63.2840.

(a) To determine the tons as received of each type of oilseed processed at your source, follow the procedures in your plan for demonstrating compliance to determine the items in paragraphs (a)(1) through (5) of this section:

(1) The dates that define each operating status period. The dates that define each operating status period include the beginning date of each calendar month and the date of any change in the source operating status. If, prior to the effective date of this rule, your source determines the oilseed inventory on an accounting month rather than a calendar month basis, and you have 12 complete accounting months of approximately equal duration in a calendar year, you may substitute the accounting month time interval for the calendar month time interval. If you choose to use an accounting month rather than a calendar month, you must document this measurement frequency selection in your plan for demonstrating compliance, and you must remain on this schedule unless you request and receive written approval from the agency responsible for these NESHAP. The dates on each oilseed inventory log must be consistent with the dates recorded for the solvent inventory.

(2) Source operating status. You must categorize the source operation for each recorded time interval. The source operating status for each time interval recorded on the oilseed inventory for each type of oilseed must be consistent with the operating status recorded on the solvent inventory logs as described in Sec. 63.2853(a)(2).

(3) Measuring the beginning and ending inventory for each oilseed. You are required to measure and record the oilseed inventory on the beginning and ending dates of each normal
operating period that occurs during an operating month. An operating month is any calendar month with at least one normal operating period. You must consistently follow the procedures described in your plan for demonstrating compliance, as specified in Sec. 63.2851, to determine the oilseed inventory on an as received basis and maintain readily available records of the oilseed inventory as described by Sec. 63.2862(c)(3).

(4) Tons of each oilseed received. Record the type of oilseed and tons of each shipment of oilseed received and added to your on-site storage.

(5) Oilseed inventory adjustments. In some situations, determining the quantity of oilseed processed directly from the measured oilseed inventory and quantity of oilseed received is not an accurate estimate of the tons of oilseed processed for use in determining compliance ratios. For example, spoiled and molded oilseed removed from storage but not processed by your source will result in an overestimate of the quantity of oilseed processed. In such cases, you must adjust the oilseed inventory and provide a justification for the adjustment. Situations that may require oilseed inventory adjustments include, but are not limited to, the situations listed in paragraphs (a)(5)(i) through (v) of this section:

(i) Oilseed that mold or otherwise become unsuitable for processing.
(ii) Oilseed you sell before it enters the processing operation.
(iii) Oilseed destroyed by an event such as a process malfunction, fire, or natural disaster.
(iv) Oilseed processed through operations prior to solvent extraction such as screening, dehulling, cracking, drying, and conditioning; but that are not routed to the solvent extractor for further processing.
(v) Periodic physical measurements of inventory. For example, some sources periodically empty oilseed storage silos to physically measure the current oilseed inventory. This periodic measurement procedure typically results in a small inventory correction. The correction factor, usually less than 1 percent, may be used to make an adjustment to the source's oilseed inventory that was estimated previously with indirect measurement techniques. To make this adjustment, your plan for demonstrating compliance must provide for such an adjustment.

(b) Use Equation 1 of this section to determine the quantity of each oilseed type processed at your affected source during normal operating periods recorded within a calendar month. Equation 1 of this section follows:

\[
\text{Monthly Quantity of Each Oilseed Processed (tons)} = \sum (\text{SEEDB} - \text{SEEDE} + \text{SEEDR} \pm \text{SEEDA})
\]

Where:

\(\text{SEEDB} = \text{Tons of oilseed in the inventory at the beginning of normal operating period ``i'' as determined in accordance with paragraph (a)(3) of this section.}\)

\(\text{SEEDE} = \text{Tons of oilseed in the inventory at the end of normal operating period ``i'' as determined in accordance with paragraph (a)(3) of this section.}\)

\(\text{SEEDR} = \text{Tons of oilseed received during normal operating period ``i'' as determined in accordance with paragraph (a)(4) of this section.}\)

\(\text{SEEDA} = \text{Tons of oilseed added or removed from the oilseed inventory during normal operating period ``i'' as determined in accordance with paragraph (a)(5) of this section.}\)

\(n = \text{Number of normal operating periods in the calendar month during which this type oilseed was processed.}\)
(c) The quantity of each oilseed processed is the total tons of each type of listed oilseed processed during normal operating periods in the previous 12 operating months. You determine the tons of each oilseed processed by summing the monthly quantity of each oilseed processed for the previous 12 operating months. You must record the 12 operating months quantity of each type of oilseed processed by the end of each calendar month following an operating month. Use the 12 operating months quantity of each type of oilseed processed to determine the compliance ratio as described in Sec. 63.2840. The quantity of oilseed processed does not include oilseed processed during the operating status periods in paragraphs (c)(1) through (4) of this section:

(1) Nonoperating periods as described in Sec. 63.2853 (a)(2)(ii).
(2) Initial startup periods as described in Sec. 63.2850(c)(2) or (d)(2).
(3) Malfunction periods as described in Sec. 63.2850(e)(2).
(4) Exempt operation periods as described in Sec. 63.2853 (a)(2)(v).
(5) If any one of these four operating status periods span an entire calendar month, then the calendar month is treated as a nonoperating month and there is no compliance ratio determination.

Notifications, Reports, and Records

Sec. 63.2860  What notifications must I submit and when?

You must submit the one-time notifications listed in paragraphs (a) through (d) of this section to the responsible agency:

(a) Initial notification for existing sources. For an existing source, submit an initial notification to the agency responsible for these NESHAP no later than 120 days after the effective date of this subpart. In the notification, include the items in paragraphs (a)(1) through (5) of this section:

(1) The name and address of the owner or operator.
(2) The physical address of the vegetable oil production process.
(3) Identification of the relevant standard, such as the vegetable oil production NESHAP, and compliance date.
(4) A brief description of the source including the types of listed oilseeds processed, nominal operating capacity, and type of desolventizer(s) used.
(5) A statement designating the source as a major source of HAP or a demonstration that the source meets the definition of an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.

(c) Significant modification notifications. Any existing or new source that plans to undergo a significant modification as defined in Sec. 63.2872 must submit two reports as described in paragraphs (c)(1) and (2) of this section:

(1) Initial notification. You must submit an initial notification to the agency responsible for these NESHAP 30 days prior to initial startup of the significantly modified source. The initial notification must demonstrate that the proposed changes qualify as a significant modification. The initial notification must include the items in paragraphs (c)(1)(i) and (ii) of this section:

(i) The expected startup date of the modified source.
(ii) A description of the significant modification including a list of the equipment that will be replaced or modified. If the significant modification involves changes other than adding or replacing extractors, desolventizer-toasters (conventional and specialty), and meal dryer-coolers, then you must also include the fixed capital cost of the new components, expressed as a percentage of the fixed capital cost to build a comparable new vegetable oil production process; supporting documentation for the cost estimate; and documentation that the proposed changes will significantly affect solvent losses.

(2) Notification of actual startup. You must submit a notification of actual startup date within 15 days after initial startup of the modified source. The notification must include the items in paragraphs (c)(2)(i) through (iv) of this section:
   (i) The initial startup date of the modified source.
   (ii) An indication whether you have elected to operate under an initial startup period subject to Sec. 63.2850(d)(2).
   (iii) The anticipated duration of any initial startup period.
   (iv) A justification for the anticipated duration of any initial startup period.

(d) Notification of compliance status. As an existing, new, or reconstructed source, you must submit a notification of compliance status report to the responsible agency no later than 60 days after determining your initial 12 operating months compliance ratio. If you are an existing source, you generally must submit this notification no later than 50 calendar months after the effective date of these NESHAP (36 calendar months for compliance, 12 operating months to record data, and 2 calendar months to complete the report). If you are a new or reconstructed source, the notification of compliance status is generally due no later than 20 calendar months after initial startup (6 calendar months for the initial startup period, 12 operating months to record data, and 2 calendar months to complete the report). The notification of compliance status must contain the items in paragraphs (d)(1) through (6) of this section:
   (1) The name and address of the owner or operator.
   (2) The physical address of the vegetable oil production process.
   (3) Each listed oilseed type processed during the previous 12 operating months.
   (4) Each HAP identified under Sec. 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 operating months period used for the initial compliance determination.
   (5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
   (6) A compliance certification indicating whether the source complied with all of the requirements of this subpart throughout the 12 operating months used for the initial source compliance determination. This certification must include a certification of the items in paragraphs (d)(6)(i) through (iii) of this section:
      (i) The plan for demonstrating compliance (as described in Sec. 63.2851) and SSM plan (as described in Sec. 63.2852) are complete and available on-site for inspection.
      (ii) You are following the procedures described in the plan for demonstrating compliance.
      (iii) The compliance ratio is less than or equal to 1.00.
Sec. 63.2861 What reports must I submit and when?

After the initial notifications, you must submit the reports in paragraphs (a) through (d) of this section to the agency responsible for these NESHAP at the appropriate time intervals:

(a) Annual compliance certifications. The first annual compliance certification is due 12 calendar months after you submit the notification of compliance status. Each subsequent annual compliance certification is due 12 calendar months after the previous annual compliance certification. The annual compliance certification provides the compliance status for each operating month during the 12 calendar months period ending 60 days prior to the date on which the report is due. Include the information in paragraphs (a)(1) through (6) of this section in the annual certification:

(1) The name and address of the owner or operator.
(2) The physical address of the vegetable oil production process.
(3) Each listed oilseed type processed during the 12 calendar months period covered by the report.
(4) Each HAP identified under Sec. 63.2854(a) as being present in concentrations greater than 1 percent by volume in each delivery of solvent received during the 12 calendar months period covered by the report.
(5) A statement designating the source as a major source of HAP or a demonstration that the source qualifies as an area source. An area source is a source that is not a major source and is not collocated within a plant site with other sources that are individually or collectively a major source.
(6) A compliance certification to indicate whether the source was in compliance for each compliance determination made during the 12 calendar months period covered by the report. For each such compliance determination, you must include a certification of the items in paragraphs (a)(6)(i) through (ii) of this section:

(i) You are following the procedures described in the plan for demonstrating compliance.
(ii) The compliance ratio is less than or equal to 1.00.

(b) Deviation notification report. Submit a deviation report for each compliance determination you make in which the compliance ratio exceeds 1.00 as determined under Sec. 63.2840(c). Submit the deviation report by the end of the month following the calendar month in which you determined the deviation. The deviation notification report must include the items in paragraphs (b)(1) through (4) of this section:

(1) The name and address of the owner or operator.
(2) The physical address of the vegetable oil production process.
(3) Each listed oilseed type processed during the 12 operating months period for which you determined the deviation.
(4) The compliance ratio comprising the deviation. You may reduce the frequency of submittal of the deviation notification report if the agency responsible for these NESHAP does not object as provided in Sec. 63.10(e)(3)(iii).
(c) Periodic startup, shutdown, and malfunction report. If you choose to operate your source under an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2) or a malfunction period subject to Sec. 63.2850(e)(2), you must submit a periodic SSM report by the end of the calendar month following each month in which the initial startup period or malfunction period occurred. The periodic SSM report must include the items in paragraphs (c)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying that the report accurately states that all actions taken during the initial startup or malfunction period were consistent with the SSM plan.

(2) A description of events occurring during the time period, the time and duration of the events, and reason the time interval qualifies as an initial startup period or malfunction period.

(3) An estimate of the solvent loss during the initial startup or malfunction period with supporting documentation.

(d) Immediate SSM reports. If you handle a SSM during an initial startup period subject to Sec. 63.2850(c)(2) or (d)(2) or a malfunction period subject to Sec. 63.2850(e)(2) differently from procedures in the SSM plan and the relevant emission requirements in Sec. 63.2840, then you must submit an immediate SSM report. Immediate SSM reports consist of a telephone call or facsimile transmission to the responsible agency within 2 working days after starting actions inconsistent with the SSM plan, followed by a letter within 7 working days after the end of the event. The letter must include the items in paragraphs (d)(1) through (3) of this section:

(1) The name, title, and signature of a source's responsible official who is certifying the accuracy of the report, an explanation of the event, and the reasons for not following the SSM plan.

(2) A description and date of the SSM event, its duration, and reason it qualifies as a SSM.

(3) An estimate of the solvent loss for the duration of the SSM event with supporting documentation.

Sec. 63.2862 What records must I keep?

(a) You must satisfy the recordkeeping requirements of this section by the compliance date for your source specified in Table 1 of Sec. 63.2834.

(b) Prepare a plan for demonstrating compliance (as described in Sec. 63.2851) and a SSM plan (as described in Sec. 63.2852). In these two plans, describe the procedures you will follow in obtaining and recording data, and determining compliance under normal operations or a SSM subject to the Sec. 63.2850(c)(2) or (d)(2) initial startup period or the Sec. 63.2850(e)(2) malfunction period. Complete both plans before the compliance date for your source and keep them on-site and readily available as long as the source is operational.

(c) If your source processes any listed oilseed, record the items in paragraphs (c)(1) through (5) of this section:

(1) For the solvent inventory, record the information in paragraphs (c)(1)(i) through (vii) of this section in accordance with your plan for demonstrating compliance:

(i) Dates that define each operating status period during a calendar month.
(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval.
(iii) Record the gallons of extraction solvent in the inventory on the beginning and ending dates of each normal operating period.

(iv) The gallons of all extraction solvent received, purchased, and recovered during each calendar month.

(v) All extraction solvent inventory adjustments, additions or subtractions. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The total solvent loss for each calendar month, regardless of the source operating status.

(vii) The actual solvent loss in gallons for each operating month.

(2) For the weighted average volume fraction of HAP in the extraction solvent, you must record the items in paragraphs (c)(2)(i) through (iii) of this section:

(i) The gallons of extraction solvent received in each delivery.

(ii) The volume fraction of each HAP exceeding 1 percent by volume in each delivery of extraction solvent.

(iii) The weighted average volume fraction of HAP in extraction solvent received since the end of the last operating month as determined in accordance with Sec. 63.2854(b)(2).

(3) For each type of listed oilseed processed, record the items in paragraphs (c)(3)(i) through (vi) of this section, in accordance with your plan for demonstrating compliance:

(i) The dates that define each operating status period. These dates must be the same as the dates entered for the extraction solvent inventory.

(ii) The operating status of your source such as normal operation, nonoperating, initial startup period, malfunction period, or exempt operation for each recorded time interval. On the log for each type of listed oilseed that is not being processed during a normal operating period, you must record which type of listed oilseed is being processed in addition to the source operating status.

(iii) The oilseed inventory for the type of listed oilseed being processed on the beginning and ending dates of each normal operating period.

(iv) The tons of each type of listed oilseed received at the affected source each normal operating period.

(v) All listed oilseed inventory adjustments, additions or subtractions for normal operating periods. You must document the reason for the adjustment and justify the quantity of the adjustment.

(vi) The tons of each type of listed oilseed processed during each operating month.

(d) After your source has processed listed oilseed for 12 operating months, and you are not operating during an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period as described in Sec. 63.2850(e)(2), record the items in paragraphs (d)(1) through (5) of this section by the end of the calendar month following each operating month:

(1) The 12 operating months rolling sum of the actual solvent loss in gallons as described in Sec. 63.2853(c).

(2) The weighted average volume fraction of HAP in extraction solvent received for the previous 12 operating months as described in Sec. 63.2854(b)(3).

(3) The 12 operating months rolling sum of each type of listed oilseed processed at the affected source in tons as described in Sec. 63.2855(c).

(4) A determination of the compliance ratio. Using the values from Secs. 63.2853, 63.2854, 63.2855, and Table 1 of Sec. 63.2840, calculate the compliance ratio using Equation 2 of Sec. 63.2840.
(5) A statement of whether the source is in compliance with all of the requirements of this subpart. This includes a determination of whether you have met all of the Applicable Requirements in Sec. 63.2850.

(e) For each SSM event subject to an initial startup period as described in Sec. 63.2850(c)(2) or (d)(2), or a malfunction period as described in Sec. 63.2850(e)(2), record the items in paragraphs (e)(1) through (3) of this section by the end of the calendar month following each month in which the initial startup period or malfunction period occurred:

1. A description and date of the SSM event, its duration, and reason it qualifies as an initial startup or malfunction.
2. An estimate of the solvent loss in gallons for the duration of the initial startup or malfunction period with supporting documentation.
3. A checklist or other mechanism to indicate whether the SSM plan was followed during the initial startup or malfunction period.

Sec. 63.2863 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for review in accordance with Sec. 63.10(b)(1).

(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on-site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, in accordance with Sec. 3.10(b)(1). You can keep the records off-site for the remaining 3 years.

Subpart A – General Provisions

§40 CFR 63.4, Prohibited Activities and Circumvention:
(a) Prohibited Activities.
   1. The permittee shall not operate any affected source in violation of the requirements of this part except under:
      i. An extension of compliance granted by the Administrator under this part; or
      ii. An extension of compliance granted under this part by a State with an approved permit program; or
      iii. An exemption from compliance is granted by the President under section 112(i)(4) of the Clean Air Act.
   2. The permittee shall not fail to keep records, notify, report, or revise reports as required under this part.

(b) Circumvention. The permittee shall not build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to:

1. The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere.
2. The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions.
(3) The fragmentation of an operation such that the operation avoids regulation by a relevant standard.

(c) **Severability.** Notwithstanding any requirement incorporated into a Title V permit obtained by an owner or operator subject to the provisions of this part, the provisions of this part are federally enforceable.

**§40 CFR 63.6, Compliance with standards and maintenance requirements**

(e) **Operation and maintenance requirements.**

(1)(i) At all times, including periods of startup, shutdown, and malfunction, the permittee shall operate and maintain any affected source, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by all relevant standards.

(2)(i) Determination of whether acceptable operation and maintenance procedures are being used will be based on information available to the Administrator, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan, review of operation and maintenance records, and inspection of the source).

Authority for Requirement: 40 CFR 63 Subpart GGGG and Subpart A (General Provisions)

567 IAC 23.1(4)"a"

567 IAC 23.1(4)"cg"

**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
## Emission Point ID Number: 98-2

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU98-2</td>
<td>Feedhouse Germ Transport w/ Product Recovery Cyclone</td>
<td>CE98-2: Baghouse or CE98-1: Baghouse</td>
<td>Germ</td>
<td>38 tons/hr.</td>
<td>94-A-291-S2</td>
</tr>
</tbody>
</table>

### Applicable Requirements

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

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

**Pollutant: Opacity**

Emission Limit(s): 40 %\(^{(1)}\)

Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

567 IAC 23.3(2)"d"

**Pollutant: PM-10**

Emission Limit(s): 0.25 lb/hr.\(^{(2)}\)

Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

**Pollutant: Particulate Matter**

Emission Limit(s): 0.25 lb/hr.\(^{(2)}\), 0.1 gr/scf

Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

567 IAC 23.3(2)"a"

**Pollutant: Sulfur Dioxide (SO₂)**

Emission Limit(s): 0.15 lb/hr.\(^{(2)}\), 500 ppmv

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

**Pollutant: VOC's**

Emission Limit(s): 0.22 lb/hr.\(^{(2)}\)

Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

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

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Operational Limits & Requirements**  
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

Control equipment parameters:

1. The owner or operator shall maintain the control equipment according to manufacturer’s specifications and maintenance schedule or per written facility specific operation and maintenance plan.

Reporting & Record keeping:

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

1. The owner or operator shall maintain a record of all inspections/maintenance and any action resulting from the inspection/maintenance of the control equipment.

Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

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

Stack Height, (ft, from the ground): 47  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): 3,100  
Exhaust Temperature (°F): 160  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-291-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)
<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>217-19</td>
<td>EU217-19A</td>
<td>No. 1 HCl Storage Tank</td>
<td>NA</td>
</tr>
<tr>
<td>217-19</td>
<td>EU217-19B</td>
<td>No. 2 HCl Storage Tank</td>
<td>NA</td>
</tr>
<tr>
<td>207-1</td>
<td>EU207-1</td>
<td>Refinery Converter Flash Tank</td>
<td>05-A-607</td>
</tr>
<tr>
<td>207-2</td>
<td>EU207-1</td>
<td>DSP Converter Flash Tank</td>
<td>05-A-608</td>
</tr>
<tr>
<td>207-26</td>
<td>EU207-26</td>
<td>HCl Storage Tank</td>
<td>NA</td>
</tr>
<tr>
<td>B-25</td>
<td>EU25-72</td>
<td>Carbon Furnace No. 3</td>
<td>94-A-594-S7</td>
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<td>EU226-2</td>
<td>Carbon Furnace No. 2</td>
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<td></td>
<td>EU24-4</td>
<td>Carbon Furnace No. 4</td>
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Emission Point ID Number: 217-19

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU217-19A</td>
<td>No. 1 HCl Storage Tank</td>
<td>CE217-19: Scrubber</td>
<td>HCl</td>
<td>30,000 gallons</td>
</tr>
<tr>
<td>EU217-19B</td>
<td>No. 2 HCl Storage Tank</td>
<td></td>
<td>HCl</td>
<td>30,000 gallons</td>
</tr>
</tbody>
</table>

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 for these units at this time.

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

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

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: 207-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU207-1</td>
<td>Refinery Converter Flash Tank</td>
<td>NA</td>
<td>Liquified Starch</td>
<td>4000 gallons</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-607
567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 05-A-607
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 1.37 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 05-A-607

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 91  
Stack Opening, (inches, dia.): 10  
Exhaust Flow Rate (scfm): NA  
Exhaust Temperature (°F): 210  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 05-A-607

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 207-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU207-2</td>
<td>DSP Converter Flash Tank</td>
<td>NA</td>
<td>Liquified Starch</td>
<td>4000 gallons</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 05-A-608
567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 05-A-608
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 1.03 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 05-A-608

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 91  
Stack Opening, (inches, dia.): 6  
Exhaust Flow Rate (scfm): NA  
Exhaust Temperature (°F): 210  
Discharge Style: Horizontal  
Authority for Requirement: Iowa DNR Construction Permit 05-A-608

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  207-26

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU207-26</td>
<td>HCl Storage Tank</td>
<td>NA</td>
<td>HCl</td>
<td>10,000 gallons</td>
</tr>
</tbody>
</table>

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 for this unit at this time.

Monitoring Requirements

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

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

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

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: B-25*
* Additional emission units are associated with this emission point. Please see the Feed Process group for these units.

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU25-72</td>
<td>Carbon Furnace No. 3</td>
<td>CE25-72A: Venturi Scrubber CE25-72B: Afterburner</td>
<td>Carbon/Natural Gas</td>
<td>1.04 tons/hr./21.8 MMBtu/hr.</td>
</tr>
<tr>
<td>EU226-2</td>
<td>Carbon Furnace No. 2</td>
<td>CE226-2: Venturi Scrubber</td>
<td>Carbon/Natural Gas</td>
<td>1.04 tons/hr./25 MMBtu/hr.</td>
</tr>
<tr>
<td>EU24-4</td>
<td>Carbon Furnace No. 4</td>
<td>CE24-4A: Venturi Scrubber CE24-4B: Afterburner</td>
<td>Carbon/Natural Gas</td>
<td>1.67 tons/hr.21.86 MMBtu/hr.</td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Opacity</th>
<th>PM-10</th>
<th>Particulate Matter</th>
<th>SO_{2}</th>
<th>NO_{x}</th>
<th>VOC</th>
<th>CO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stack Total</td>
<td>5%</td>
<td>23.37 tons/yr. 0.1 gr/scf</td>
<td>23.37 tons/yr. 0.1 gr/scf</td>
<td>41.9 lb/hr. 183.52 tons/yr. 500 ppmv</td>
<td>42.35 lb/hr. 185.55 tons/yr.</td>
<td>NA</td>
<td>145.7 lb/hr. 638.24 tons/yr.</td>
</tr>
<tr>
<td>EU25-72</td>
<td>NA</td>
<td>2.98 tons/yr. 0.023 gr/scf</td>
<td>9.0 lb/hr. 39.4 tons/yr. 500 ppmv</td>
<td>6.2 lb/hr. 27.1 tons/yr.</td>
<td>8.3 lb/hr. 36.5 tons/yr.</td>
<td>20.3 lb/hr. 88.9 tons/yr.</td>
<td></td>
</tr>
<tr>
<td>EU24-4</td>
<td>NA</td>
<td>5.04 tons/yr.</td>
<td>1.15 lb/hr. 5.04 tons/yr. 0.023 gr/scf</td>
<td>8.9 lb/hr. 38.98 tons/yr. 500 ppmv</td>
<td>3.75 lb/hr. 16.43 tons/yr.</td>
<td>7.7 lb/hr. 33.73 tons/yr.</td>
<td>19.0 lb/hr. 83.22 tons/yr.</td>
</tr>
</tbody>
</table>

Authority for Requirement: Iowa DNR Construction Permit 94-A-594-S7
567 IAC 23.3(2)"d"
567 IAC 23.3(2)"a"
567 IAC 23.3(3)"e"

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

Process throughput:
1. The maximum throughput of Carbon Furnace #3 shall not exceed 50,000 pounds per day.
2. The maximum throughput of Carbon Furnace #4 shall not exceed 80,000 pounds of carbon per day.
Control equipment parameters:
1. The temperature of the afterburner (CE25-72B) for Carbon Furnace #3 shall be monitored during all stack testing done to determine compliance with the carbon monoxide standard. The temperature of the afterburner shall be maintained above 1140°F.
2. The pressure drop across the venturi scrubber (CE25-72A) for Carbon Furnace #3 shall be maintained between 5 and 45 inches of water column.
3. The water feed rate to the scrubber for Carbon Furnace #3 shall be maintained between 100 gallons per minute and 170 gallons per minute.
4. The temperature of the afterburner (i.e. hearth 0) for Carbon Furnace #4 shall be monitored during all stack testing done to determine compliance with the carbon monoxide and VOC standards. The temperature of the afterburner shall be maintained above the minimum temperature observed during all testing.
5. The pressure drop across the venturi scrubber (CE25-72A) for Carbon Furnace #4 shall be maintained at or above the pressure drop determined by the most recent compliance test for PM (inches of water column).
6. The water feed rate to the venturi scrubber for Carbon Furnace #4 shall be maintained above the flow rate measured during the most recent compliance test for PM (gallons per minute).
7. The pH of the scrubber’s liquor shall be maintained above the pH measured during the most recent compliance test for SO2. A record of the pH measured during the most recent compliance test for SO2 shall also be maintained.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The amount of carbon processed by Carbon Furnace #3 each day.
2. The amount of carbon processed by Carbon Furnace #4 each day.
3. A continuous record of the afterburner temperature for the afterburner on Carbon Furnace #3 (CE25-72B). A record of the minimum afterburner temperature in CE25-72B observed during the stack testing shall also be maintained.
4. A continuous record of the afterburner temperature for the afterburner on Carbon Furnace #4. A record of the minimum afterburner temperature observed during the stack testing shall also be maintained.
5. A continuous record of the pressure drop across the venturi scrubber on Carbon Furnace #3.
6. A continuous record of the pressure drop across the venturi scrubber on Carbon Furnace #4. A record of the pressure drop measured during the most recent compliance test for PM shall also be maintained.
7. A continuous record of the water feed rate to the venturi scrubber on Carbon Furnace #3.
8. A continuous record of the water feed rate to the venturi scrubber on Carbon Furnace #4. A record of the pressure drop measured during the most recent compliance test for PM shall also be maintained.
9. A record of the pH of the liquor for the scrubber on Carbon Furnace #4. The pH shall be measured once per day at a minimum.

Authority for Requirement: Iowa DNR Construction Permit 94-A-594-S7
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 200  
Stack Opening, (inches, dia.): 96  
Exhaust Flow Rate (scfm): 120,000  
Exhaust Temperature (°F): 160  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-594-S7

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed: EU25-72**  
Pollutant – SO₂  
Stack Test Completed on – 7/27/05  
Test Method – 40 CFR 60, Appendix A, Method 6C  
Result Concentration – 0.330 ppmv  
Authority for Requirement – Consent Decree C.D. IL, #03-CV-2066

**Stack Testing: EU24-4 Only**  
Pollutant - PM  
Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.  
Test Method - Iowa Compliance Sampling Manual Method 5  
Authority for Requirement – Iowa DNR Construction Permit 94-A-594-S7

Pollutant – SO₂  
Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.  
Test Method - 40 CFR 60, Appendix A, Method 6C  
Authority for Requirement – Iowa DNR Construction Permit 94-A-594-S7

Pollutant - NOₓ  
Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.  
Test Method - 40 CFR 60, Appendix A, Method 7E  
Authority for Requirement – Iowa DNR Construction Permit 94-A-594-S7
Pollutant – VOC's
Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method - 40 CFR 60, Appendix A, Method 25A
Authority for Requirement – Iowa DNR Construction Permit 94-A-594-S7

Pollutant - CO
Stack Test to be Completed by (date) - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
Test Method - 40 CFR 60, Appendix A, Method 10
Authority for Requirement – Iowa DNR Construction Permit 94-A-594-S7

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

Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑
Facility Maintained Operation & Maintenance Plan Required?  Yes ☑ No ☐
(Required for all pieces of Control Equipment associated with B-25)

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)
## Starch Process Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
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<tr>
<td>B-107</td>
<td>EU107-11A</td>
<td>No. 7 Starch Dryer</td>
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<td>EU114-14A</td>
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<td>EU139-6A</td>
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<td>EU102-7</td>
<td>Starch Tank #1</td>
<td>94-A-595-S2</td>
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## Starch Process Equipment List (cont.)

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>103-2</td>
<td>EU103-2</td>
<td>Fibersol Packer &amp; Supply Hopper</td>
<td>04-A-302</td>
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<tr>
<td>103-3</td>
<td>EU103-3A</td>
<td>Filter Aid Silo #1</td>
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<td>EU103-3B</td>
<td>Filter Aid Silo #2</td>
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<td>107-30</td>
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<td>#1 Fibersol Vacuum Pump</td>
<td>05-A-603</td>
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<td>107-31</td>
<td>EU107-31</td>
<td>#2 Fibersol Vacuum Pump</td>
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<td>#3 Fibersol Vacuum Pump</td>
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<td>109-1</td>
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<td>Starch Bulk Rail Loading #1</td>
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<td>Emission Unit Number</td>
<td>Emission Unit Description</td>
<td>IDNR Construction Permit Number</td>
</tr>
<tr>
<td>-----------------------</td>
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<tr>
<td>125-8</td>
<td>EU125-8A</td>
<td>Starch Day Tank #2</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>EU125-8B</td>
<td>Torus Dryer #2</td>
<td>04-A-301</td>
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<tr>
<td>127-1</td>
<td>EU127-1</td>
<td>No. 1 Starch Packer</td>
<td>NA</td>
</tr>
<tr>
<td>127-2</td>
<td>EU127-2</td>
<td>St. Regis Packer Hopper</td>
<td>NA</td>
</tr>
<tr>
<td>131-1</td>
<td>EU131-1</td>
<td>No. 11 Starch Hopper</td>
<td>94-A-326</td>
</tr>
<tr>
<td>131-2</td>
<td>EU131-2</td>
<td>No. 10 Starch Hopper</td>
<td>NA</td>
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<tr>
<td>137-1</td>
<td>EU137-1A</td>
<td>No. 20 Fuller Air Merge</td>
<td>NA</td>
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<td>EU137-1B</td>
<td>No. 21 Fuller Air Merge</td>
<td>NA</td>
</tr>
<tr>
<td></td>
<td>EU137-1C</td>
<td>No. 22 Fuller Air Merge</td>
<td>NA</td>
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<tr>
<td>137-2</td>
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<td>No. 23 Fuller Air Merge</td>
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<td></td>
<td>EU137-2B</td>
<td>No. 24 Fuller Air Merge</td>
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<td>EU137-2C</td>
<td>No. 25 Fuller Air Merge</td>
<td>NA</td>
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</table>
Emission Point ID Number: B-107

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU107-11A</td>
<td>No. 7 Starch Dryer</td>
<td>CE107-11A: Scrubber</td>
<td>Corn Starch</td>
<td>5 tons/hr. 0.015 mmcf/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Natural Gas</td>
<td></td>
</tr>
</tbody>
</table>
| EU107-5A     | No. 6 Starch Dryer        | CE107-5A: Scrubber No. 1  
                |                           | CE107-6A: Scrubber No. 2  | Corn Starch  | 9.38 tons/hr. 0.029 mmcf/hr. |
|              |                           |                   | Natural Gas  |                |
| EU107-7A     | No. 9 Starch Dryer        | CE107-7A: Scrubber No. 1  
                |                           | CE107-8A: Scrubber No. 2  | Corn Starch  | 9.38 tons/hr. 0.029 mmcf/hr. |
|              |                           |                   | Natural Gas  |                |
| EU111-5A     | No. 5 Starch Dryer        | CE111-5A: Scrubber No. 1  
                |                           | CE111-6A: Scrubber No. 2  | Corn Starch  | 11.47 tons/hr. 0.03 mmcf/hr. |
|              |                           |                   | Natural Gas  |                |
| EU114-14A    | No. 4 Starch Dryer        | CE114-14A: Scrubber No. 1  
                |                           | CE114-15A: Scrubber No. 2  | Corn Starch  | 11.46 tons/hr. 0.03 mmcf/hr. |
|              |                           |                   | Natural Gas  |                |
| EU139-6A     | No. 8 Starch Dryer        | CE139-6A: Scrubber  | Corn Starch  | 10 tons/hr. 0.03 mmcf/hr. |
|              |                           |                   | Natural Gas  |                |

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: Iowa DNR Construction Permit 94-A-595-S2
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 23.46 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-595-S2

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-595-S2
567 IAC 23.4(7)

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 0.073 lb/hr., 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 94A-595-S2
567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOₓ)
Emission Limit(s): 19.94 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-595-S2
Pollutant:  VOC's  
Emission Limit(s):  17.81 lb/hr.\(^{(2)}\)  
Authority for Requirement:  Iowa DNR Construction Permit 94-A-595-S2

Pollutant:  Carbon Monoxide (CO)  
Emission Limit(s):  27.51 lb/hr.\(^{(2)}\)  
Authority for Requirement:  Iowa DNR Construction Permit 94-A-595-S2

\(^{(1)}\) An exceedance of the indicator opacity of (5\%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs.

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

**Control equipment parameters:**
1. The facility shall determine the appropriate limits on scrubbing flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.
2. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.

**Reporting & Record keeping:**  
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubbing flow rate and pressure drop for the scrubbers.

Authority for Requirement:  Iowa DNR Construction Permit 94-A-595-S2
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 135  
Stack Opening, (feet, dia.): 168  
Exhaust Flow Rate (acfm): 273,333  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-595-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed:**
- Pollutant – VOC's  
  - Stack Test Completed on – April 20, 2006  
  - Test Method – Iowa DNR Approved Method  
  - Result Emission Rate – 2.5 lb/hr.  
  - Authority for Requirement – Iowa DNR Construction Permit 94-A-595-S1

**Stack Testing:**
- Pollutant – PM-10  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – 40 CFR 51, Appendix M, 201A with 202\(^{(1)}\)  
  - Authority for Requirement - 567 IAC 22.108(3)

- Pollutant – Particulate Matter  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – Iowa Compliance Sampling Manual Method 5  
  - Authority for Requirement - 567 IAC 22.108(3)

- Pollutant – Nitrogen Oxides (NO\(_x\))  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – 40 CFR 60, Appendix A, Method 7E  
  - Authority for Requirement - 567 IAC 22.108(3)

- Pollutant – Carbon Monoxide (CO)  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – 40 CFR 60, Appendix A, Method 10  
  - Authority for Requirement - 567 IAC 22.108(3)
(1) Or approved alternative

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for all control equipment associated with emission point B-107)

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

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

Authority for Requirement: 567 IAC 22.108(3)
### Emission Point ID Numbers: 102-12 & 102-13

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU102-7</td>
<td>Starch Tank #1</td>
<td></td>
<td>Starch</td>
<td>27,562 gallons</td>
</tr>
<tr>
<td>EU102-8</td>
<td>Starch Tank #2</td>
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<tr>
<td>EU102-9</td>
<td>Starch Tank #3</td>
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<tr>
<td>EU102-10</td>
<td>Starch Tank #4</td>
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<td>EU112-1</td>
<td>Starch Tank #5</td>
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<td>EU112-2</td>
<td>Starch Tank #6</td>
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<td>EU112-3</td>
<td>Starch Tank #7</td>
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<td>EU121-4</td>
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<tr>
<td>EU123-3B</td>
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<td>EU123-3C</td>
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<td>EU123-3D</td>
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<td>EU123-4A</td>
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<td>EU123-4B</td>
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<td>EU123-4D</td>
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<td>EU120-2</td>
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<td>EU120-3</td>
<td>Starch Tank #27</td>
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<td>EU121-5</td>
<td>Starch Tank #30</td>
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</tr>
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<td>EU121-6</td>
<td>Starch Tank #31</td>
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<tr>
<td>EU121-7</td>
<td>Starch Tank #32</td>
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<td>Starch Tank #36</td>
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<tr>
<td>EU120-7</td>
<td>Starch Tank #37</td>
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<td>EU120-8</td>
<td>Starch Tank #38</td>
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</tr>
</tbody>
</table>
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): 40 %
567 IAC 23.3(2)"d"

Pollutant: VOC's
Emission Limit(s): 230 tons/yr.(2),(3)

(1) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is a 12-month rolling total.

(3) Combined total from both stacks.

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

Control equipment parameters:
1. The control equipment shall be inspected and maintained according to manufacturer’s specifications.
2. The facility shall determine the appropriate limits on scrubbant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

Work practice standards:
1. The owner or operator shall submit to the IDNR within 120 days of permit issuance a plan to monitor VOC emissions to establish a correlation to emission rates for the various specialty products produced by these units. This monitoring shall start no later than 270 days after permit issuance. ADM shall submit a copy of the results and evaluation to the IDNR within 60 days after the monitoring and correlation have been completed.
2. The owner or operator shall use the correlation emission rates established to calculate VOC emission rates per each specialty product produced.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. The owner or operator shall keep records of control equipment inspections and maintenance.
2. The facility shall monitor scrubbingant flow rate and pressure drop for the scrubbers.
3. The owner or operator shall keep track of specialty products produced on a daily basis, and calculate the monthly and twelve month rolling total VOC emissions for these emission points (EP 102-12 and 102-13) based on the correlation emission rates established for each specialty product produced.


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

Stack Height, (ft, from the ground): 58
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 10,000
Exhaust Temperature (°F): 90
Discharge Style: Vertical Unobstructed


The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing: (Required for EP's 102-12 and 102-13)**
- Pollutant – VOCs*
- Stack Test to be Completed by - Within 270 days from July 1, 2005
- Test Method – Iowa DNR Approved Method

*Test Run Time = 1 hour.

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)
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>(Required for CE120-12 and CE102-13)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 103-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU103-2</td>
<td>Fibersol Packer &amp; Supply Hopper</td>
<td>CE103-2: Fabric Filter</td>
<td>Fibersol</td>
<td>9000 lbs/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-302
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.15 lb/hr.\(^{(2)}\), 0.68 tons/yr.\(^{(3)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-302

Pollutant: Particulate Matter
Emission Limit(s): 0.15 lb/hr.\(^{(2)}\), 0.68 tons/yr.\(^{(3)}\), 0.009 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 04-A-302

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of three runs.

\(^{(3)}\) Standard is a 12-month rolling total.
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 38  
Stack Opening, (inches, dia.): 10  
Exhaust Flow Rate (scfm): 2000  
Exhaust Temperature (°F): 70  
Discharge Style: Horizontal  
Authority for Requirement: Iowa DNR Construction Permit 04-A-302

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 103-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU103-3A</td>
<td>Filter Aid Silo #1</td>
<td>CE103-3: Fabric Filter</td>
<td>Filter Aid</td>
<td>30,000 lbs.</td>
</tr>
<tr>
<td>EU103-3B</td>
<td>Filter Aid Silo #2</td>
<td></td>
<td>Filter Aid</td>
<td>30,000 lbs.</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 04-A-299  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.19 lb/hr. (2), 0.84 tons/yr. (3)  
Authority for Requirement: Iowa DNR Construction Permit 04-A-299

Pollutant: Particulate Matter  
Emission Limit(s): 0.19 lb/hr. (2), 0.84 tons/yr. (3), 0.009 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 04-A-299

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(1) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

(2) Standard is expressed as the average of three runs.

(3) Standard is a 12-month rolling total.
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 67  
Stack Opening, (inches, dia.):  10  
Exhaust Flow Rate (scfm):  2500  
Exhaust Temperature (°F):  70  
Discharge Style: Horizontal  
Authority for Requirement: Iowa DNR Construction Permit 04-A-299

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>107-30</td>
<td>EU107-30</td>
<td>#1 Fibersol Vacuum Pump</td>
<td>NA</td>
<td>Fibersol</td>
<td>2000 acfm</td>
<td>05-A-603</td>
</tr>
<tr>
<td>107-31</td>
<td>EU107-31</td>
<td>#2 Fibersol Vacuum Pump</td>
<td>NA</td>
<td>Fibersol</td>
<td>125 acfm</td>
<td>05-A-604-S1</td>
</tr>
<tr>
<td>107-32</td>
<td>EU107-32</td>
<td>#3 Fibersol Vacuum Pump</td>
<td>NA</td>
<td>Fibersol</td>
<td>2000 acfm</td>
<td>05-A-605</td>
</tr>
<tr>
<td>107-33</td>
<td>EU107-33</td>
<td>#4 Fibersol Vacuum Pump</td>
<td>NA</td>
<td>Fibersol</td>
<td>2000 acfm</td>
<td>05-A-606</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %⁽¹⁾
567 IAC 23.3(2)"d"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
567 IAC 23.3(3)"e"

Pollutant: VOC's
Emission Limit(s): 0.68 lb/hr.⁽²⁾

⁽¹⁾ Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

⁽²⁾ Standard is expressed as the average of 3 runs
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

EP's 107-30, 107-32 & 107-33
Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (acfm): 2000
Exhaust Temperature (°F): 140
Discharge Style: Horizontal

EP 107-31
Stack Height, (ft, from the ground): 30
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (acfm): 125
Exhaust Temperature (°F): 140
Discharge Style: Horizontal
Authority for Requirement: Iowa DNR Construction Permit 05-A-604-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Stack Testing Completed: EP 107-31
- Pollutant – VOC’s
- Stack Test Completed on – April 20, 2006
- Test Method – Iowa DNR Approved Method
- Result Emission Rate – 0.090 lb/hr.
Authority for Requirement - Iowa DNR Construction Permits 05-A-604

**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)

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>109-1</td>
<td>EU109-1</td>
<td>Starch Bulk Rail Loading #1</td>
<td>CE109-1: Dust Collector</td>
<td>Corn Starch</td>
<td>22.5 tons/hr.</td>
</tr>
<tr>
<td>109-2</td>
<td>EU109-2</td>
<td>Starch Bulk Rail Loading #2</td>
<td>CE109-2: Dust Collector</td>
<td>Corn Starch</td>
<td>22.5 tons/hr.</td>
</tr>
</tbody>
</table>

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): 40 %
  - Authority for Requirement: 567 IAC 23.3(2)"d"

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

**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 ☐ (Required for CE109-1 and CE109-2)
- **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 Numbers:  110-1 & 110-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-1</td>
<td>EU110-1</td>
<td>I Starch Hopper</td>
<td>CE110-1: Bin Vent Filter</td>
<td>Corn Starch</td>
<td>20 tons/hr.</td>
<td>98-A-828</td>
</tr>
</tbody>
</table>

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): 40 %\(^{(1)}\)
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.19 lb/hr., 0.83 tons/yr.

Pollutant: Particulate Matter
Emission Limit(s): 0.32 lb/hr., 1.4 tons/yr., 0.1 gr/scf
567 IAC 23.3(2)"a"

\(^{(1)}\) If visible emissions are observed other than startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.
**Emission Point Characteristics**
*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 65  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): 690  
Exhaust Temperature (°F): 70  
Discharge Style: Obstructed Vertical or Horizontal  


The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

Agency Approved Operation & Maintenance Plan Required? ☒ No ☐  
Facility Maintained Operation & Maintenance Plan Required? ☐ No ☒  
(Required for CE110-1 and CE110-2)  
Compliance Assurance Monitoring (CAM) Plan Required? ☒ 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: 112-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU112-4A</td>
<td>Muratic Acid Storage Tank No. 1</td>
<td>CE112-4: Scrubber</td>
<td>HCl</td>
<td>35,000 gallons</td>
</tr>
<tr>
<td>EU112-4B</td>
<td>Muratic Acid Storage Tank No. 2</td>
<td></td>
<td>HCl</td>
<td>35,000 gallons</td>
</tr>
<tr>
<td>EU112-4C</td>
<td>Muratic Acid Storage Tank No. 3</td>
<td></td>
<td>HCl</td>
<td>35,000 gallons</td>
</tr>
<tr>
<td>EU112-4D</td>
<td>Muratic Acid Storage Tank No. 4</td>
<td></td>
<td>HCl</td>
<td>35,000 gallons</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-190
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.29 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-190

Pollutant: Particulate Matter
Emission Limit(s): 1.29 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 04-A-190
567 IAC 23.3(2)"a"

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedence of the indicator opacity of 25% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedence. The permit holder shall also file an “indicator opacity exceedence report” with the DNR field office and keep records as required in the policy. If exceedences continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Operational Limits & Requirements**

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

Control equipment parameters:
1. The pressure drop across the scrubber shall be maintained within the range outlined in the manufacturer's design specifications for the scrubber.
2. The liquid flow rate to the scrubber shall be maintained within the range outlined in the manufacturer's design specifications for the scrubber.

Reporting & Record keeping:

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

1. A copy of the scrubber manufacturer's design parameters including the pressure drop across and the liquid feed rate to the scrubber (CE 112-4) shall be maintained on-site for review.
2. The liquid feed to the packed bed scrubber (CE 112-4) shall be monitored continuously.
3. The pressure drop across the packed bed scrubber (CE 112-4) shall be monitored continuously.

Authority for Requirement: Iowa DNR Construction Permit 04-A-190

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 59
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 1500
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 04-A-109

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:
  Pollutant - Opacity
  Stack Test to be Completed - within 90 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
  Test Method - 40 CFR 60, Appendix A, Method 9
  Authority for Requirement – Iowa DNR Construction Permit 04-A-109

  Pollutant – PM-10
  Stack Test to be Completed - within 90 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
  Test Method - 40 CFR 51, Appendix M, 201A with 202*
  Authority for Requirement – Iowa DNR Construction Permit 04-A-109

  Pollutant – Particulate Matter
  Stack Test to be Completed - within 90 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
  Test Method - Iowa Compliance Sampling Manual Method 5
  Authority for Requirement – Iowa DNR Construction Permit 04-A-109

* Or approved alternative.

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

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

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

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

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: 116-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU116-1</td>
<td>Old Dextrin Hopper</td>
<td>CE116-1: Baghouse</td>
<td>Corn Starch</td>
<td>10417 lb/hr.</td>
</tr>
</tbody>
</table>

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

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: 116-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU116-2</td>
<td>Natural Gas Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>6 MMBtu/hr.</td>
</tr>
</tbody>
</table>

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): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Operational Limits & Requirements

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


- This boiler is subject to 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to 40 CFR 63.7506(c), existing small gaseous fueled boilers are not subject to the initial notification requirements in 63.9(b) and are not subject to any requirements in Subparts DDDDD or A of 40 CFR 63
Authority for Requirement: 40 CFR 60 Subparts DDDDD and A
567 IAC 23.1(4)"dd"
**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 117-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU117-4A</td>
<td>Dextrin Roaster No. 1</td>
<td></td>
<td>Starch</td>
<td>2500 lb/hr.</td>
</tr>
<tr>
<td>EU117-4B</td>
<td>Dextrin Roaster No. 2</td>
<td></td>
<td>Starch</td>
<td>2500 lb/hr.</td>
</tr>
<tr>
<td>EU117-4C</td>
<td>Dextrin Roaster No. 3</td>
<td></td>
<td>Starch</td>
<td>2500 lb/hr.</td>
</tr>
<tr>
<td>EU117-4D</td>
<td>Dextrin Roaster No. 4</td>
<td></td>
<td>Starch</td>
<td>2500 lb/hr.</td>
</tr>
</tbody>
</table>

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/scf
Authority for Requirement: Iowa DNR Construction Permit 76-A-131 567 IAC 23.4(7)

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: 117-5

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU117-5A</td>
<td>Dextrin Roaster No. 5</td>
<td>CE117-5: Cyclone</td>
<td>Starch</td>
<td>5000 lb/hr.</td>
</tr>
<tr>
<td>EU117-5B</td>
<td>Dextrin Roaster No. 6</td>
<td></td>
<td>Starch</td>
<td>5000 lb/hr.</td>
</tr>
</tbody>
</table>

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/scf
Authority for Requirement: Iowa DNR Construction Permit 76-A-132
567 IAC 23.4(7)

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: 118-1**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
</table>
| EU118-1       | Fibersol Spray Dryer      | CE118-1A: Fabric Filter  
CE118-1B: Fabric Filter  
CE118-1C: Cyclone  
CE118-1D: Cyclone | Starch  
Natural Gas | 9000 lb/hr.  
19.7 MMBtu/hr. |
| EU118-2       | Fibersol Tote Bagger      | CE118-1B: Fabric Filter | Starch | 9000 lb/hr |

**Applicable Requirements**

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

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

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Limit(s)</th>
<th>Authority for Requirement</th>
</tr>
</thead>
</table>
| Opacity            | 40 %              | Iowa DNR Construction Permit 96-A-1029-S2  
567 IAC 23.3(2)"d" |
| PM-10              | 2.31 lb/hr.  
10.14 tons/yr. | Iowa DNR Construction Permit 96-A-1029-S2 |
| Particulate Matter | 2.31 lb/hr.  
10.14 tons/yr.  
0.006 gr/dscf | Iowa DNR Construction Permit 96-A-1029-S2 |
| Sulfur Dioxide (SO₂) | 0.045 lb/hr.  
500 ppmv | Iowa DNR Construction Permit 96-A-1029-S2  
567 IAC 23.3"e" |
| Nitrogen Oxides (NOₓ) | 1.97 lb/hr. | Iowa DNR Construction Permit 96-A-1029-S2 |
| VOC's              | 1.0 lb/hr. | Iowa DNR Construction Permit 96-A-1029-S2 |
Pollutant: Carbon Monoxide (CO)  
Emission Limit(s): 1.65 lb/hr.\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 96-A-1029-S2

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs

\(^{(3)}\) Standard is a 12-month rolling total.

**Operational Limits & Requirements**

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

**Process throughput:**
1. The maximum production of the fibersol spray dryer shall not exceed 9000 pounds per hour on a dry basis.
2. The dryer shall be heated by natural gas only. The heat input to the dryer is 19.7 MMBTU/hr.

**Control equipment parameters:**
1. The fabric filter baghouses and the cyclones shall be maintained in accordance with manufacturers’ instructions and specifications.
2. The pressure drop across the dryer’s fabric filter baghouse shall not exceed the pressure drop determined during the most recent emissions test that demonstrated compliance with the PM limit.

**Reporting & Record keeping:**

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

1. A continuous record of the pressure drop across the dryer’s fabric filter baghouse.
2. A record of the minimum pressure drop across the dryer’s fabric filter baghouse observed during the compliance test shall be maintained for reference.
3. A record of the amount of material processed through the dryer shall be recorded at the end of each hour.
4. A record of any maintenance performed on the fabric filter baghouses and cyclones.

Authority for Requirement: Iowa DNR Construction Permit 96-A-1029-S2
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 120
- Stack Opening, (inches, dia.): 48
- Exhaust Flow Rate  (scfm): 45,000
- Exhaust Temperature  (°F): 105
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 96-A-1029-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing Completed:**
- Pollutant – Particulate Matter
- Stack Test Completed – 10/10/2005
- Test Method - Iowa Compliance Sampling Manual Method 5
- Result Concentration – 0.001 gr/scf
- Result Emission Rate – 0.42 lb/hr.
- Authority for Requirement – Iowa DNR Construction Permit 96-A-1029-S2

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

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

**Facility Maintained Operation & Maintenance Plan Required?** Yes ☒ No ☐
*(Required for CE118-1A, CE118-1B, CE118-C, and CE118-1D)*

**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: 124-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU124-1</td>
<td>No. 9 Starch Hopper</td>
<td>CE124-1: Baghouse</td>
<td>Corn Starch</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 94-A-325-S1  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.11 lb/hr., 0.47 tons/yr., 0.01 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 94-A-325-S1

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 55  
Stack Opening, (inches): 11 x 13  
Exhaust Flow Rate (scfm): 1400  
Exhaust Temperature (°F): 70  
Authority for Requirement: Iowa DNR Construction Permit 94-A-325-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**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: 124-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU124-2</td>
<td>Starch Packer</td>
<td>CE124-2: Baghouse</td>
<td>Starch</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5 %
Authority for Requirement: Iowa DNR Construction Permit 94-A-324
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.069 lb/hr., 0.302 tons/yr., 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 94-A-324

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

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 55
Stack Opening, (inches): 4 x 6
Exhaust Flow Rate (scfm): 800
Exhaust Temperature (°F): 70
Authority for Requirement: Iowa DNR Construction Permit 94-A-324

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**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: 124-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU124-3A</td>
<td>No. 1 Hopper</td>
<td>CE124-3: Dust Collector</td>
<td>Starch</td>
<td>7.5 tons/hr.</td>
</tr>
<tr>
<td>EU124-3B</td>
<td>No. 2 Hopper</td>
<td></td>
<td>Starch</td>
<td>7.5 tons/hr.</td>
</tr>
</tbody>
</table>

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

**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:** 124-4

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU124-4</td>
<td>No. 8 Starch Hopper</td>
<td>CE124-4: Dust Collector</td>
<td>Starch</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

**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/scf
  - Authority for Requirement: 567 IAC 23.3(2)"a"

**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: 125-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU125-4</td>
<td>Continuous Dextrin Hopper</td>
<td>CE125-4: Baghouse</td>
<td>Starch</td>
<td>22,500 lb/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 98-A-464-S4
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.10 lb/hr.\(^{(2)}\), 0.45 tons/yr.\(^{(3)}\)
Authority for Requirement: Iowa DNR Construction Permit 98-A-464-S4

Pollutant: Particulate Matter
Emission Limit(s): 0.10 lb/hr.\(^{(2)}\), 0.45 tons/yr.\(^{(3)}\), 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-464-S4

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs

\(^{(3)}\) Standard is a 12-month rolling total.

**Operational Limits & Requirements**

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

Process throughput:
1. The maximum amount of starch received by the starch hopper shall not exceed 22,500 pounds per hour.
Control equipment parameters:
   1. The pressure drop across the dust collector associated with this emission point shall be maintained between 0.5 inches and 6 inches of water column.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
   1. A continuous record of the pressure drop across the dust collector associated with this emission point shall be maintained.
   2. A record of the amount of dextrin starch produced shall be recorded at the end of each hour.

Authority for Requirement: Iowa DNR Construction Permit 98-A-464-S4

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

Stack Height, (ft, from the ground): 89
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1200
Exhaust Temperature (°F): 70
Discharge Style: Downward

Authority for Requirement: Iowa DNR Construction Permit 98-A-464-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td>☒</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>☒</td>
<td></td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

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: 125-5

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU125-5A</td>
<td>#1 Dextrin Roaster</td>
<td></td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
<tr>
<td>EU125-5B</td>
<td>#1 Dextrin Holding Screw</td>
<td>CE125-5: Wet Scrubber</td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
<tr>
<td>EU125-5C</td>
<td>#1 Dextrin Cooler</td>
<td></td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
<tr>
<td>EU125-5D</td>
<td>#1 Dextrin Slurry Tank</td>
<td></td>
<td>Starch</td>
<td>6,500 gallons</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.1 lb/hr.\(^{(2)}\)

Pollutant: Particulate Matter
Emission Limit(s): 0.1 lb/hr.\(^{(2)}\), 0.1 gr/dscf
567 23.3(2)"a"

Pollutant: VOC's
Emission Limit(s): 2.51 lb/hr.\(^{(2)}\)

\(^{(1)}\) Visible emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The maximum amount of starch processed by these emission units shall not exceed 11,250 pounds per hour.
2. The maximum amount of hydrochloric acid used in the continuous dextrin starch process shall not exceed 9.4 tons in any rolling 12-month period. This includes equipment exhausted through emission points 125-5, 125-6, 125-7, and 125-8.

Control equipment parameters:
1. The control equipment shall be inspected and maintained according to manufacturer’s specifications.
2. The facility shall determine the appropriate limits on scrubcant flow rate and pressure drop for the scrubbers, using the procedure described in the consent decree between the US and ADM of August 21, 2003.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A continuous record of the pressure drop across the wet scrubber associated with this emission point shall be maintained.
2. A continuous record of the liquid flow to the wet scrubber associated with this emission point shall be maintained.
3. A record of the minimum pressure drop across the wet scrubber observed during the compliance test shall be maintained for reference.
4. A record of the minimum liquid flow rate to the wet scrubber observed during the compliance test shall be maintained for reference.
5. A record of the amount of dextrin starch produced shall be recorded at the end of each hour.
6. The permittee shall maintain the following monthly records:
   a. the amount of hydrochloric acid used in the continuous dextrin process (pounds or tons); and
   b. the rolling 12-month total of the amount of hydrochloric acid used in the continuous dextrin process.

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 100  
Stack Opening, (inches, dia.): 8  
Exhaust Flow Rate (scfm): 1200  
Exhaust Temperature (°F): 120  
Discharge Style: Vertical Unobstructed  

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing Completed:**

- Pollutant – VOC's  
  - Stack Test Completed on – January 12, 2006  
  - Test Method – Iowa DNR Approved Method  
  - Result Emission Rate – 0.053 lb/hr.  

**Stack Testing:**

- Pollutant – Particulate Matter  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – Iowa Compliance Sampling Manual Method 5  
  - Authority for Requirement - 567 IAC 22.108(3)

ADM may test emission point 125-7 to demonstrate compliance with the Particulate Matter emission limits for this emission point. However, if the results of this stack testing exceed the Particulate Matter emission limit for 125-7, then both emission points shall be considered out of compliance with their Particulate Matter emission limits.

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)
Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒

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

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

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: 125-6**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU125-6A</td>
<td>#1 Starch Day Tank</td>
<td>CE125-6: Dust Collector</td>
<td>Starch</td>
<td>15,000 lbs.</td>
</tr>
<tr>
<td>EU125-6E</td>
<td>Torus Dryer #1</td>
<td></td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit(s): 40%\(^{(1)}\)  
Authority for Requirement: Iowa DNR Construction Permit 98-A-463-S4  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.26 lb/hr.\(^{(2)}\), 1.13 tons/yr.\(^{(3)}\)  
Authority for Requirement: Iowa DNR Construction Permit 98-A-463-S4

Pollutant: Particulate Matter  
Emission Limit(s): 0.26 lb/hr.\(^{(2)}\), 1.13 tons/yr.\(^{(3)}\), 0.01 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 98-A-463-S4

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs

\(^{(3)}\) Standard is a 12-month rolling total.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The maximum amount of starch processed by these emission units shall not exceed 11,250 pounds per hour.
2. The maximum amount of hydrochloric acid used in the continuous dextrin starch process shall not exceed 9.4 tons in any rolling 12-month period. This includes equipment exhausted through emission points 125-5, 125-6, 125-7, and 125-8.

Control equipment parameters:
1. The pressure drop across the dust collector associated with this emission point shall be maintained between 1 inch and 6 inches of water column.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A continuous record of the pressure drop across the dust collector associated with this emission point shall be maintained.
2. A record of the amount of dextrin starch produced shall be recorded at the end of each hour.
3. The permittee shall maintain the following monthly records:
   a) the amount of hydrochloric acid used in the continuous dextrin process (pounds or tons); and
   b) the rolling 12-month total of the amount of hydrochloric acid used in the continuous dextrin process.


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

Stack Height, (ft, from the ground): 98
Stack Opening, (inches, dia.): 16
Exhaust Flow Rate (scfm): 3000
Exhaust Temperature (°F): 125
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 98-A-463-S4

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:
Pollutant – PM-10
Stack test to be Completed by – December 5, 2008
Test Method – 40 CFR 51, Appendix M, 201A with 202*
Authority for Requirement - 567 IAC 22.108(3)
* Or approved alternative

Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

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

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

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: 125-7

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU125-7A</td>
<td>Dextrin Roaster #2</td>
<td></td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
<tr>
<td>EU125-7B</td>
<td>Dextrin Holding Screw #2</td>
<td>CE125-7: Scrubber</td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
<tr>
<td>EU125-7C</td>
<td>Dextrin Cooler #2</td>
<td></td>
<td>Starch</td>
<td>11,250 lb/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-300
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.10 lb/hr.\(^{(2)}\), 0.45 tons/yr.\(^{(3)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-300

Pollutant: Particulate Matter
Emission Limit(s): 0.10 lb/hr.\(^{(2)}\), 0.45 tons/yr.\(^{(3)}\), 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 04-A-300

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of “no visible emissions” will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs

\(^{(3)}\) Standard is a 12-month rolling total.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The maximum amount of hydrochloric acid used in the continuous dextrin starch process shall not exceed 9.4 tons in any rolling 12-month period. This includes equipment exhausted through emission points 125-5, 125-6, 125-7, and 125-8.

Control equipment parameters:
1. The pressure drop across the wet scrubber associated with this emission point shall be maintained between the minimum value observed during the compliance test and 9 inches of water column.
2. The liquid flow rate to the wet scrubber associated with this emission point shall be maintained above the minimum value observed during the compliance test.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A continuous record of the pressure drop across the wet scrubber associated with this emission point shall be maintained.
2. A continuous record of the liquid flow to the wet scrubber associated with this emission point shall be maintained.
3. A record of the minimum pressure drop across the wet scrubber observed during the compliance test shall be maintained for reference.
4. A record of the wet scrubber’s minimum liquid flow rate observed during the compliance test shall be maintained for reference.
5. The permittee shall maintain the following monthly records:
   a. the amount of hydrochloric acid used in the continuous dextrin process (pounds or tons); and
   b. the rolling 12-month total of the amount of hydrochloric acid used in the continuous dextrin process.

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

Stack Height, (ft, from the ground): 97
Stack Opening, (inches, dia.): 8
Exhaust Flow Rate (scfm): 1200
Exhaust Temperature (°F): 120
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 04-A-300

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing:**
- Pollutant – Opacity\(^{(1)}\)
  - Stack Test to be Completed - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
  - Test Method - 40 CFR 60, Appendix A, Method 9
  - Authority for Requirement – Iowa DNR Construction Permit 04-A-300

- Pollutant – Particulate Matter\(^{(2)}\)
  - Stack Test to be Completed - within 60 days after achieving maximum production rate and no later than one hundred eighty (180) days after the initial startup date of the proposed equipment.
  - Test Method - Iowa Compliance Sampling Manual Method 5
  - Authority for Requirement – Iowa DNR Construction Permit 04-A-300

\(^{(1)}\) Test Run Time = 1 hour
\(^{(2)}\) Test Run Time = 2 hours

ADM may test this emission point to demonstrate compliance with the Particulate Matter emission limits for emission point 125-5. However, if the results of this stack testing exceed the Particulate Matter emission limit for this point, then both emission points shall be considered out of compliance with their Particulate Matter emission limits.

The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)
Agency Approved Operation & Maintenance Plan Required?  Yes ☐ No ☑

Facility Maintained Operation & Maintenance Plan Required?  Yes ☑ No ☐

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

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: 125-8

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU125-8A</td>
<td>Starch Day Tank #2</td>
<td>CE125-8: Fabric Filter</td>
<td>Dextrin Starch</td>
<td>15,000 lbs.</td>
</tr>
<tr>
<td>EU125-8B</td>
<td>Torus Dryer #2</td>
<td></td>
<td>Dextrin Starch</td>
<td>11,250 lb/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-301
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.34 lb/hr.\(^{(2)}\), 1.49 tons/yr.\(^{(3)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-301

Pollutant: Particulate Matter
Emission Limit(s): 0.34 lb/hr.\(^{(2)}\), 1.49 tons/yr.\(^{(3)}\), 0.01 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 04-A-301

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs

\(^{(3)}\) Standard is a 12-month rolling total.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. The maximum amount of starch processed by these emission units shall not exceed 11,250 pounds per hour.
2. The maximum amount of hydrochloric acid used in the continuous dextrin starch process shall not exceed 9.4 tons in any rolling 12-month period. This includes equipment exhausted through emission points 125-5, 125-6, 125-7, and 125-8.

Control equipment parameters:
1. The pressure drop across the dust collector associated with this emissions point shall be maintained between 1 inch and 6 inches of water column.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. A continuous record of the pressure drop across the dust collector associated with this emission point shall be maintained.
2. A record of the amount of dextrin starch produced shall be recorded at the end of each hour.
3. The permittee shall maintain the following monthly records:
   a. The amount of hydrochloric acid used in the continuous dextrin process (pounds or tons); and
   b. The rolling 12-month total of the amount of hydrochloric acid used in the continuous dextrin process.


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

Stack Height, (ft, from the ground): 95
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (scfm): 4000
Exhaust Temperature (°F): 125
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 04-A-301

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
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: 127-1**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU127-1</td>
<td>No. 1 Starch Packer</td>
<td>CE127-1: Dust Collector</td>
<td>Starch</td>
<td>1 ton/hr.</td>
</tr>
</tbody>
</table>

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

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

- **Agency Approved Operation & Maintenance Plan Required?**
  - Yes [ ]
  - No [x]

- **Facility Maintained Operation & Maintenance Plan Required?**
  - Yes [ ]
  - No [x]

- **Compliance Assurance Monitoring (CAM) Plan Required?**
  - Yes [ ]
  - No [x]

*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: 127-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU127-2</td>
<td>St. Regis Packer Hopper</td>
<td>CE127-2: Baghouse</td>
<td>Starch</td>
<td>4 tons/hr.</td>
</tr>
</tbody>
</table>

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

**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: 131-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU131-1</td>
<td>No. 11 Starch Hopper</td>
<td>CE131-1: Baghouse</td>
<td>Starch</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5 %
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-326
    - 567 IAC 23.3(2)"d"

- **Pollutant:** PM-10
  - Emission Limit(s): 0.231 lb/hr., 1.01 tons/yr.
  - Authority for Requirement: Iowa DNR Construction Permit 94-A-326

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

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 55
- Stack Opening, (inches): 11 x 13
- Exhaust Flow Rate (scfm): 2700
- Exhaust Temperature (°F): 70
- Authority for Requirement: Iowa DNR Construction Permit 94-A-326

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Opacity:
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 131-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU131-2</td>
<td>No. 10 Starch Hopper</td>
<td>CE131-2: Dust Collector</td>
<td>Starch</td>
<td>15 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

Emission Limits (lb./hr, gr./scf, 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/scf
Authority for Requirement: 567 IAC 23.3(2)"a"

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: 137-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU137-1A</td>
<td>No. 20 Fuller Air Merge  CE137-1A: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
<td></td>
</tr>
<tr>
<td>EU137-1B</td>
<td>No. 21 Fuller Air Merge  CE137-1B: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
<td></td>
</tr>
<tr>
<td>EU137-1C</td>
<td>No. 22 Fuller Air Merge  CE137-1C: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
<td></td>
</tr>
</tbody>
</table>

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

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

Stack Testing:
Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

According to the Department's Periodic Monitoring Guidance Document, emission points 137-1 and 137-2 are subject to stack testing for Particulate Matter. The facility may choose to perform one stack test for Particulate Matter on one of the two emission points, depending on the availability, to demonstrate compliance with the Particulate Matter limits for both emission points. However, if the results of the representative stack testing exceed the Particulate Matter emission limit, then both emission points shall be considered out of compliance with their Particulate Matter emission limits.
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required?  Yes ☒ No ☐
(Required for CE137-1A, CE137-1B, CE137-1C)

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: 137-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU137-2A</td>
<td>No. 23 Fuller Air Merge</td>
<td>CE137-2A: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
</tr>
<tr>
<td>EU137-2B</td>
<td>No. 24 Fuller Air Merge</td>
<td>CE137-2B: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
</tr>
<tr>
<td>EU137-2C</td>
<td>No. 25 Fuller Air Merge</td>
<td>CE137-2C: Baghouse</td>
<td>Starch</td>
<td>22.5 tons/hr.</td>
</tr>
</tbody>
</table>

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

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

**Stack Testing:**
Pollutant – Particulate Matter
Stack test to be Completed by – December 5, 2008
Test Method – Iowa Compliance Sampling Manual Method 5
Authority for Requirement - 567 IAC 22.108(3)

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

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>224-19</td>
<td>EU224-19A</td>
<td>Crystallizer No. 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19B</td>
<td>Crystallizer No. 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19C</td>
<td>Crystallizer No. 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19D</td>
<td>Crystallizer No. 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19E</td>
<td>Crystallizer No. 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19F</td>
<td>Crystallizer No. 9</td>
<td></td>
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<tr>
<td></td>
<td>EU224-19G</td>
<td>Crystallizer No. 10</td>
<td>93-A-382-S5</td>
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<tr>
<td></td>
<td>EU224-19H</td>
<td>Alcohol Tank</td>
<td>04-A-315-S2</td>
</tr>
<tr>
<td></td>
<td>EU224-19I</td>
<td>Mother Liquor Tank</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19J</td>
<td>Crystallizer No. 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19K</td>
<td>Crystallizer No. 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU224-19L</td>
<td>Crystallizer No. 8</td>
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</tr>
<tr>
<td>224-20</td>
<td>EU224-20A</td>
<td>2nd Pass Fructose Dryer</td>
<td>94-A-314-S4</td>
</tr>
<tr>
<td></td>
<td>EU224-20B</td>
<td>2nd Pass Fructose Cooler</td>
<td></td>
</tr>
<tr>
<td>224-22</td>
<td>EU224-22</td>
<td>#1 Dextrose Cooler Transport</td>
<td>01-A-909-S1</td>
</tr>
<tr>
<td>224-23</td>
<td>EU224-23</td>
<td>#2 Dextrose Cooler Transport</td>
<td>01-A-910-S1</td>
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<tr>
<td>230-3</td>
<td>EU230-3</td>
<td>Fructose/Dextrose Packers</td>
<td>94-A-316-S1</td>
</tr>
<tr>
<td>230-4</td>
<td>EU230-4</td>
<td>Dextrose Bagging/Palletizing</td>
<td>94-A-315-S2</td>
</tr>
<tr>
<td>230-6</td>
<td>EU230-6</td>
<td>No. 2 Dextrose Transport System</td>
<td>94-A-311-S2</td>
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<td>230-7</td>
<td>EU230-7</td>
<td>No. 1 Dextrose Transport System</td>
<td>94-A-310-S1</td>
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<tr>
<td>230-8</td>
<td>EU230-8</td>
<td>No. 3 &amp; 4 Dextrose Transport System</td>
<td>96-A-386-S1</td>
</tr>
<tr>
<td>230-9</td>
<td>EU230-9</td>
<td>Dextrose Fines Transport</td>
<td>98-A-192-S1</td>
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<tr>
<td>86-1</td>
<td>EU86-1</td>
<td>1st Pass Hersey Dryer</td>
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<tr>
<td>86-2</td>
<td>EU86-2</td>
<td>1st Pass Louisville Dryer</td>
<td>NA</td>
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<tr>
<td>86-6</td>
<td>EU86-6</td>
<td>Dextrose Hopper Airlock Aspiration</td>
<td>04-A-305</td>
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<tr>
<td></td>
<td>EU86-7A</td>
<td>No. 1 Dextrose Hopper</td>
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<tr>
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<td>EU86-7B</td>
<td>No. 2 Dextrose Hopper</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU86-7C</td>
<td>No. 3 Dextrose Hopper</td>
<td></td>
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<tr>
<td></td>
<td>EU86-7D</td>
<td>No. 4 Dextrose Hopper</td>
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<td></td>
<td>EU86-7E</td>
<td>No. 5 Dextrose Hopper</td>
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</tr>
<tr>
<td></td>
<td>EU86-7F</td>
<td>No. 6 Dextrose Hopper</td>
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<td>EU86-7G</td>
<td>No. 7 Dextrose Hopper</td>
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<tr>
<td></td>
<td>EU86-7H</td>
<td>No. 8 Dextrose Hopper</td>
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<td>EU86-7I</td>
<td>F Scalper</td>
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<td>EU224-1</td>
<td>Dextrose Rail Scale Hopper</td>
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</tr>
<tr>
<td>86-7</td>
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<td></td>
<td>01-A-912-S2</td>
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<td></td>
<td>EU86-9B</td>
<td>2nd Pass Dextrose Dryer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU86-9C</td>
<td>2nd Pass Louisville Dryer and Fines Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU86-9D</td>
<td>2nd Pass Hersey Dryer</td>
<td></td>
</tr>
<tr>
<td>Emission Point Number</td>
<td>Emission Unit Number</td>
<td>Emission Unit Description</td>
<td>IDNR Construction Permit Number</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------------</td>
<td>--------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>86-11</td>
<td>EU86-11</td>
<td>Bulk Truck Blower</td>
<td>NA</td>
</tr>
<tr>
<td>86-12</td>
<td>EU86-12</td>
<td>Dextrose Cooler No. 1</td>
<td>NA</td>
</tr>
<tr>
<td>86-13</td>
<td>EU86-13</td>
<td>Dextrose Cooler No. 2</td>
<td>96-A-108-S1</td>
</tr>
<tr>
<td>86-14</td>
<td>EU86-14</td>
<td>#2 Dextrose Tote Bagger</td>
<td>98-A-615</td>
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<tr>
<td>86-15</td>
<td>EU86-15A</td>
<td>#1 Whizzer Mechanical Separator</td>
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</tr>
<tr>
<td></td>
<td>EU86-15B</td>
<td>#2 Whizzer Mechanical Separator</td>
<td>01-A-911-S1</td>
</tr>
<tr>
<td></td>
<td>EU86-15C</td>
<td>#3 Whizzer Mechanical Separator</td>
<td></td>
</tr>
</tbody>
</table>
Emission Point ID Numbers: 224-19 & 224-21

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU224-19A</td>
<td>Crystallizer No. 1</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19B</td>
<td>Crystallizer No.2</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19C</td>
<td>Crystallizer No.3</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19D</td>
<td>Crystallizer No.4</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19E</td>
<td>Crystallizer No.5</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19F</td>
<td>Crystallizer No.9</td>
<td>CE224-19: Scrubber</td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19G</td>
<td>Crystallizer No.10</td>
<td>CE224-21: Scrubber</td>
<td>Fructose, Alcohol</td>
<td>40,000 gallons</td>
</tr>
<tr>
<td>EU224-19H</td>
<td>Alcohol Tank</td>
<td></td>
<td>Alcohol</td>
<td>29,203 gallons</td>
</tr>
<tr>
<td>EU224-19I</td>
<td>Mother Liquor Tank</td>
<td></td>
<td>Mother Liquor</td>
<td>30,143 gallons</td>
</tr>
<tr>
<td>EU224-19J</td>
<td>Crystallizer No.6</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>30,000 gallons</td>
</tr>
<tr>
<td>EU224-19K</td>
<td>Crystallizer No.7</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>22,700 gallons</td>
</tr>
<tr>
<td>EU224-19L</td>
<td>Crystallizer No.8</td>
<td></td>
<td>Fructose, Alcohol</td>
<td>17,000 gallons</td>
</tr>
</tbody>
</table>

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.*

**EP 224-19**
Pollutant: VOC's
Emission Limit(s): 0.25 lb/hr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 93-A-382-S5

**EP 224-21**
Pollutant: VOC's
Emission Limit(s): 2.26 lb/hr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-315-S2

\(^{(1)}\) Standard is expressed as the average of 3 runs
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. Crystalline fructose production shall not exceed 69,000 tons per rolling twelve (12) month period.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. For the first twelve (12) months of operation, determine the cumulative amount of crystalline fructose produced for each month of operation.
2. After the first twelve (12) months of operation, determine the total amount of crystalline fructose produced on a rolling-12-month basis for each month of operation.


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

EP 224-19
Stack Height, (ft, from the ground): 100
Stack Opening, (inches, dia.): 4*
Exhaust Flow Rate (scfm): 300
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 93-A-382-S5

EP 224-21
Stack Height, (ft, from the ground): 100
Stack Opening, (inches, dia.): 4*
Exhaust Flow Rate (scfm): 200
Exhaust Temperature (°F): 70
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 04-A-315-S2
* The construction permits for these emission points list the stack opening as 6 inches in diameter. The actual opening is 4 inches. The facility shall apply for construction permit modifications to correct the stack diameters.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing: Required for EP 224-21
Pollutant – VOC’s
Stack Test to be Completed by – February 18, 2006
Test Method – 40 CFR 60, Appendix A, Method 25A(1)
Authority for Requirement – Iowa DNR Construction Permit 04-A-315-S1

(1) Test Run Time = 1 hour
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

Agency Approved Operation & Maintenance Plan Required? Yes ☐ No ☒
Facility Maintained Operation & Maintenance Plan Required? Yes ☒ No ☐
(Required for CE224-19 and CE224-21)

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 224-20

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU224-20A</td>
<td>2nd Pass Fructose Dryer</td>
<td>CE224-20: Scrubber</td>
<td>Crystalline Fructose</td>
<td>7.88 tons/hr.</td>
</tr>
<tr>
<td>EU224-20B</td>
<td>2nd Pass Fructose Cooler</td>
<td></td>
<td>Crystalline Fructose</td>
<td>7.88 tons/hr.</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 94-A-314-S4
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 6.45 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-314-S4

Pollutant: Particulate Matter
Emission Limit(s): 6.45 lb/hr., 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 94-A-314-S4
567 IAC 23.3(2)"a"

Pollutant: VOC's
Emission Limit(s): 8.39 lb/hr.
Authority for Requirement: Iowa DNR Construction Permit 94-A-314-S4

An exceedance of an indicator opacity of 10% will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an “indicator opacity exceedance report” with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

Standard is expressed as the average of 3 runs.
**Operational Limits & Requirements**

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

Process throughput:
1. Crystalline fructose production shall not exceed 69,000 tons per rolling twelve (12) month period.

Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*
1. After the first twelve (12) months of operation, determine the total amount of crystalline fructose produced on a rolling-12-month basis for each month of operation.

Authority for Requirement: Iowa DNR Construction Permit 94-A-314-S4

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 130*
- Stack Opening, (inches, dia.): 36*
- Exhaust Flow Rate (scfm): 29,200
- Exhaust Temperature (°F): 85
- Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 94-A-314-S4

* The construction permit lists the stack height as 108 feet and the stack diameter as 60 inches in diameter. The actual measurements are listed above. The facility shall apply for a construction permit modification to include the correct stack measurements.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)
Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>224-22</td>
<td>EU224-22</td>
<td>#1 Dextrose Cooler Transport</td>
<td>CE224-22: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>21 tons/hr.</td>
<td>01-A-909-S1</td>
</tr>
<tr>
<td>224-23</td>
<td>EU224-23</td>
<td>#2 Dextrose Cooler Transport</td>
<td>CE224-23: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>21 tons/hr.</td>
<td>01-A-910-S1</td>
</tr>
</tbody>
</table>

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): 40 %\(^{(1)}\)
  - Authority for Requirement: Iowa DNR Construction Permits 01-A-909-S1 & 01-A-910-S1
    - 567 IAC 23.3(2)"d"

- **Pollutant:** PM-10
  - Emission Limit(s): 0.236 lb/hr.\(^{(2)}\)
  - Authority for Requirement: Iowa DNR Construction Permits 01-A-909-S1 & 01-A-910-S1

- **Pollutant:** Particulate Matter
  - Emission Limit(s): 0.236 lb/hr.\(^{(2)}\), 0.1 gr/scf
  - Authority for Requirement: Iowa DNR Construction Permits 01-A-909-S1 & 01-A-910-S1
    - 567 IAC 23.3(2)"a"

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

\(^{(2)}\) Standard is expressed as the average of 3 runs.
**Emission Point Characteristics**

*The emission points shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height (ft. from the ground)</th>
<th>Stack Opening (inches, dia)</th>
<th>Exhaust Flow Rate (scfm)</th>
<th>Exhaust Temperature (°F)</th>
<th>Discharge Style</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP224-22</td>
<td>105.5</td>
<td>14</td>
<td>4200</td>
<td>170</td>
<td>Horizontal</td>
<td>01-A-909-S1</td>
</tr>
<tr>
<td>EP224-23</td>
<td>105.5</td>
<td>14</td>
<td>3700</td>
<td>170</td>
<td>Horizontal</td>
<td>01-A-910-S1</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing Completed:**

**EP224-22**
- Pollutant – Particulate Matter
- Stack Test to be Completed – 7/01/2004
- Test Method - 40 CFR 60, Appendix A, Method 5
- Result Concentration – 0.003 gr/scf
- Result Emission Rate – 0.12 lb/hr.
- Authority for Requirement – Iowa DNR Construction Permit 01-A-909

**EP224-23**
- Pollutant – Particulate Matter
- Stack Test to be Completed – 7/02/2004
- Test Method - 40 CFR 60, Appendix A, Method 5
- Result Concentration – 0.003 gr/scf
- Result Emission Rate – 0.10 lb/hr.
- Authority for Requirement – Iowa DNR Construction Permit 01-A-909

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)
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: 230-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
</table>

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: PM-10
Emission Limit(s): 0.30 lb/hr., 0.005 gr/scf.
Authority for Requirement: Iowa DNR Construction Permit 94-A-316-S1

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

Compliance Plan
The owner/operator of this equipment shall comply with the applicable requirements listed below.
With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Exception(s)
1. This emission unit has been modified to vent inside the building. ADM shall submit a permit modification request to reflect this change.

Condition(s)
The permittee shall apply for a construction permit modification from the Iowa Department of Natural Resources within 60 days of the issuance date of this permit. This point will be in compliance at the time the construction permit modification for the unit venting through this point is issued.
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 72
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (acfm): 7000
Exhaust Temperature (°F): 110
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 94-A-316-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 230-4

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU230-4</td>
<td>Dextrose Bagging/Palletizing</td>
<td>CE230-4: Dust Collector</td>
<td>Crystalline Dextrose</td>
<td>27.1 tons/hr.</td>
</tr>
</tbody>
</table>

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: PM-10
Emission Limit(s): 0.60 lb/hr., 0.01 gr/scf.
Authority for Requirement: Iowa DNR Construction Permit 94-A-315-S2

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

Compliance Plan
The owner/operator of this equipment shall comply with the applicable requirements listed below.
With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Exception(s)
1. This emission unit has been modified to vent inside the building. ADM shall submit a permit modification request to reflect this change.

Condition(s)
The permittee shall apply for a construction permit modification from the Iowa Department of Natural Resources within 60 days of the issuance date of this permit. This point will be in compliance at the time the construction permit modification for the unit venting through this point is issued.
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 75  
Stack Opening, (inches, dia.): 1 @ 8", 4 @ 5"  
Exhaust Flow Rate (acfm): 7000  
Exhaust Temperature (°F): 110  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permit 94-A-315-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 230-6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU230-6</td>
<td>No. 2 Dextrose Transport System</td>
<td>CE230-6: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>22.5 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5 %
Authority for Requirement: Iowa DNR Construction Permit 94-A-311-S2
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.204 lb/hr., 0.90 tons/yr., 0.01 gr/dscf.
Authority for Requirement: Iowa DNR Construction Permit 94-A-311-S2

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

Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 93
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 2800
Exhaust Temperature (°F): 70
Authority for Requirement: Iowa DNR Construction Permit 94-A-311-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements

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

Opacity:
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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: 230-7

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU230-7</td>
<td>No. 1 Dextrose Transport System</td>
<td>CE230-7: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>22.5 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5 %  
Authority for Requirement: Iowa DNR Construction Permit 94-A-310-S1  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 0.46 lb/hr., 2.01 tons/yr., 0.01 gr/dscf.  
Authority for Requirement: Iowa DNR Construction Permit 94-A-310-S1

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

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 93  
Stack Opening, (inches, dia.): 12  
Exhaust Flow Rate (scfm): 5400  
Exhaust Temperature (°F): 70  
Authority for Requirement: Iowa DNR Construction Permit 94-A-310-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**Stack Testing:**
- **Pollutant – PM-10**
  - Stack Test to be Completed – If this emission unit operates more than 500 hours in any 12-month rolling period, the unit shall be tested within 60 days.
  - Test Method – 40 CFR 51, Appendix M, 201A with 202*
  - Authority for Requirement - 567 IAC 22.108(3)
- * Or approved alternative

  - **Pollutant – Particulate Matter**
  - Stack Test to be Completed – If this emission unit operates more than 500 hours in any 12-month rolling period, the unit shall be tested within 60 days.
  - Test Method – Iowa Compliance Sampling Manual Method 5
  - Authority for Requirement - 567 IAC 22.108(3)

*The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)*
Agency Approved Operation & Maintenance Plan Required?  Yes ☐  No ☒
Facility Maintained Operation & Maintenance Plan Required?  Yes ☐  No ☒
Compliance Assurance Monitoring (CAM) Plan Required?  Yes ☐  No ☒

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: 230-8

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU230-8</td>
<td>No. 3 &amp; 4 Dextrose Transport System</td>
<td>CE230-8: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>37.5 tons/hr.</td>
</tr>
</tbody>
</table>

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): 5 %
Authority for Requirement: Iowa DNR Construction Permit 94-A-386-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.43 lb/hr., 0.01 gr/dscf.
Authority for Requirement: Iowa DNR Construction Permit 96-A-386-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.43 lb/hr., 0.01 gr/dscf.
Authority for Requirement: Iowa DNR Construction Permit 96-A-386-S1

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 95
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 5200
Exhaust Temperature (°F): 95
Authority for Requirement: Iowa DNR Construction Permit 96-A-386-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements

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

Opacity:
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >5% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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: 230-9**

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU230-9</td>
<td>Dextrose Fines Transport</td>
<td>CE230-9:Dust Collector</td>
<td>Dextrose</td>
<td>6 tons/hr.</td>
</tr>
</tbody>
</table>

### 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):** 20 %  
  **Authority for Requirement:** Iowa DNR Construction Permit 98-A-192-S1  
  567 IAC 23.3(2)"d"

- **Pollutant:** Particulate Matter  
  **Emission Limit(s):** 0.1 gr/scf  
  **Authority for Requirement:** Iowa DNR Construction Permit 98-A-192-S1  
  567 IAC 23.3(2)"a"

### Emission Point Characteristics

*The emission point shall conform to the specifications listed below.*

- **Stack Height, (ft, from the ground):** 95  
- **Stack Opening, (inches, dia.):** 8  
- **Exhaust Flow Rate (scfm):** 1800  
- **Exhaust Temperature (°F):** 100  
- **Discharge Style:** Vertical Unobstructed  
  **Authority for Requirement:** Iowa DNR Construction Permit 98-A-192-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

**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 Numbers: 86-1 & 86-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-1</td>
<td>EU86-1</td>
<td>1st Pass Hersey Dryer</td>
<td>CE86-1: Scrubber</td>
<td>Dextrose</td>
<td>7.29 tons/hr.</td>
</tr>
<tr>
<td>86-2</td>
<td>EU86-2</td>
<td>1st Pass Louisville Dryer</td>
<td>CE86-2: Scrubber</td>
<td>Dextrose</td>
<td>7.29 tons/hr.</td>
</tr>
</tbody>
</table>

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): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

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

Monitoring Requirements

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

Stack Testing:
- Pollutant – Particulate Matter
- Stack test to be Completed by – December 5, 2008
- Test Method – Iowa Compliance Sampling Manual Method 5
- Authority for Requirement - 567 IAC 22.108(3)

According to the Department's Periodic Monitoring Guidance Document, emission points 86-1 and 86-2 are subject to stack testing for Particulate Matter. The facility may choose to perform one stack test for Particulate Matter on one of the two emission points, depending on the availability, to demonstrate compliance with Particulate Matter limit for both emission points. However, if the results of the representative stack testing exceed the Particulate Matter emission limit, then both emission points shall be considered out of compliance with their Particulate Matter emission limit.
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

Facility Maintained Operation & Maintenance Plan Required? Yes ☐ No ☒
(Required for CE86-1 and CE86-2)

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: 86-6

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-6</td>
<td>Dextrose Hopper Airlock Aspiration</td>
<td>CE86-6: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>18 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-305
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.12 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permit 04-A-305

Pollutant: Particulate Matter
Emission Limit(s): 0.12 lb/hr.\(^{(2)}\), 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 04-A-305
567 IAC 23.4(7)

\(^{(1)}\) Per DNR Air Quality Policy 3-b-08, Opacity Limits, an exceedance of the indicator opacity of (10%) will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. The permit holder shall also file an "indicator opacity exceedance report" with the DNR field office and keep records as required in the policy. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 122  
Stack Opening, (inches, dia.): 10  
Exhaust Flow Rate (scfm): 1350  
Exhaust Temperature (°F): 90  
Discharge Style: Horizontal  
Authority for Requirement: Iowa DNR Construction Permit 04-A-305

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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: 86-7

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-7A</td>
<td>#1 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7B</td>
<td>#2 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7C</td>
<td>#3 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7D</td>
<td>#4 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7E</td>
<td>#5 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7F</td>
<td>#6 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7G</td>
<td>#7 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7H</td>
<td>#8 Dextrose Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>3.9 tons/hr.</td>
</tr>
<tr>
<td>EU86-7I</td>
<td>F Scalper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>6250 lb/hr.</td>
</tr>
<tr>
<td>EU224-1</td>
<td>Dextrose Rail Scale Hopper</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>80,000 lb/hr.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CE86-7: Dust Collector</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Applicable Requirements

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

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

**Pollutant: Opacity**  
Emission Limit(s): 40 %\(^{(1)}\)  
Authority for Requirement: Iowa DNR Construction Permit 01-A-912-S2  
567 IAC 23.3(2)"d"

**Pollutant: PM-10**  
Emission Limit(s): 0.445 lb/hr.\(^{(2)}\)  
Authority for Requirement: Iowa DNR Construction Permit 01-A-912-S2

**Pollutant: Particulate Matter**  
Emission Limit(s): 0.445 lb/hr.\(^{(2)}\), 0.1 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 01-A-912-S2  
567 IAC 23.3(2)"a"

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

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**

The emission point shall conform to the specifications listed below:

- Stack Height, (ft, from the ground): 96
- Stack Opening, (inches, dia.): 14
- Exhaust Flow Rate (scfm): 2800
- Exhaust Temperature (°F): 100
- Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 01-A-912-S2

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing Completed:**
- Pollutant – Particulate Matter
- Stack Test to be Completed on – 6/29/2004
- Test Method - Iowa Compliance Sampling Manual Method 5
- Result Concentration – 0.003 gr/dscf
- Result Emission Rate 0.08 lb/hr.

Authority for Requirement – Iowa DNR Construction Permit 01-A-912-S1

**Agency Approved Operation & Maintenance Plan Required?** Yes [X] No [ ]

**Facility Maintained Operation & Maintenance Plan Required?** Yes [X] No [ ]

**Compliance Assurance Monitoring (CAM) Plan Required?** Yes [X] 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: 86-9

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-9B</td>
<td>2nd Pass Dextrose Dryer</td>
<td></td>
<td></td>
<td>20.83 tons/hr.</td>
</tr>
<tr>
<td>EU86-9D</td>
<td>2nd Pass Hersey Dryer</td>
<td>CE86-9: Wet Scrubber CE86-9D: Scrubber</td>
<td>Crystalline Dextrose</td>
<td>7.29 tons/hr.</td>
</tr>
</tbody>
</table>

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 %<sup>(1)</sup>  
Authority for Requirement: Iowa DNR Construction Permit 94-A-317-S3  
567 IAC 23.3(2)"d"

Pollutant: PM-10  
Emission Limit(s): 3.77 lb/hr.<sup>(2)</sup>, 0.01 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 94-A-317-S3

Pollutant: Particulate Matter  
Emission Limit(s): 0.1 gr/dscf  
Authority for Requirement: Iowa DNR Construction Permit 94-A-317-S3  
567 IAC 23.3(2)"a"

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

<sup>(2)</sup> Standard is expressed as the average of 3 runs
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Control equipment parameters:
1. The scrubber must be operated and maintained according to the manufacturer’s specifications.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Record all maintenance performed on the scrubber.
Authority for Requirement: Iowa DNR Construction Permit 94-A-317-S3

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

Stack Height, (ft, from the ground): 171
Stack Opening, (inches, dia.): 60
Exhaust Flow Rate (scfm): 44,000
Exhaust Temperature (°F): Ambient
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 94-A-317-S3

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Stack Testing:
- Pollutant – PM-10
  - Stack test to be Completed by – December 5, 2008
  - Test Method – 40 CFR 51, Appendix M, 201A with 202*
  - Authority for Requirement - 567 IAC 22.108(3)
- Pollutant – Particulate Matter
  - Stack test to be Completed by – December 5, 2008
  - Test Method – Iowa Compliance Sampling Manual Method 5
  - Authority for Requirement - 567 IAC 22.108(3)

* Or approved alternative

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

Agency Approved Operation & Maintenance Plan Required? Yes ☒ No ☐ (Required for CE86-9)

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: 86-11**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-11</td>
<td>Bulk Truck Blower</td>
<td>CE86-11: Blower Filter</td>
<td>Crystalline Dextrose</td>
<td>20 tons/hr.</td>
</tr>
</tbody>
</table>

**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"

**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: 86-12

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-12</td>
<td>Dextrose Cooler No. 1</td>
<td>CE86-12: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>17.6 tons/hr.</td>
</tr>
</tbody>
</table>

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"

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

**Stack Testing:**  
- Pollutant – PM-10  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – 40 CFR 51, Appendix M, 201A with 202*  
  - Authority for Requirement - 567 IAC 22.108(3)
  
* Or approved alternative

- Pollutant – Particulate Matter  
  - Stack test to be Completed by – December 5, 2008  
  - Test Method – Iowa Compliance Sampling Manual Method 5  
  - Authority for Requirement - 567 IAC 22.108(3)

According to the Department's Periodic Monitoring Guidance Document, emission points 86-12 and 86-13 are subject to stack testing for PM-10 and Particulate Matter. The facility may choose to perform one stack test for Particulate Matter on one of the two emission points, depending on the availability, to demonstrate compliance with PM-10 and Particulate Matter limits for both emission points. However, if the results of the representative stack testing exceed the Particulate Matter emission limit, then both emission points shall be considered out of compliance with their PM-10 and Particulate Matter emission limits.
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

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

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

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: 86-13

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-13</td>
<td>Dextrose Cooler No. 2</td>
<td>CE86-13: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>22.43 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40 % (1)
Authority for Requirement: Iowa DNR Construction Permit 96-A-108-S1
567 IAC 23.3(2) "d"

Pollutant: PM-10
Emission Limit(s): 0.57 lb/hr. (2)
Authority for Requirement: Iowa DNR Construction Permit 96-A-108-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.57 lb/hr. (2), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 96-A-108-S1
567 IAC 23.4(7)

(1) Visible Emissions will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the DNR may require additional proof to demonstrate compliance (e.g., stack testing).

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

Control equipment parameters:
1. The owner or operator shall inspect and maintain the control equipment according to manufacturer’s specifications.
Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The owner or operator shall keep records of control equipment inspections and maintenance.

Authority for Requirement: Iowa DNR Construction Permit 96-A-108-S1

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

- **Stack Height**, (ft, from the ground): 120
- **Stack Opening**, (inches, dia.): 24
- **Exhaust Flow Rate** (scfm): 12,000
- **Exhaust Temperature** (°F): 70
- **Discharge Style**: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permit 96-A-108-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Stack Testing:**
- **Pollutant – PM-10**
  - Stack test to be Completed by – December 5, 2008
  - Test Method – 40 CFR 51, Appendix M, 201A with 202*
  - Authority for Requirement - 567 IAC 22.108(3)
- **Pollutant – Particulate Matter**
  - Stack test to be Completed by – December 5, 2008
  - Test Method – Iowa Compliance Sampling Manual Method 5
  - Authority for Requirement - 567 IAC 22.108(3)

* Or approved alternative

According to the Department's Periodic Monitoring Guidance Document, emission points 86-12 and 86-13 are subject to stack testing for PM-10 and Particulate Matter. The facility may choose to perform one stack test for Particulate Matter on one of the two emission points, depending on the availability, to demonstrate compliance with PM-10 and Particulate Matter limits for both emission points. However, if the results of the representative stack testing exceed the Particulate Matter emission limit, then both emission points shall be considered out of compliance with their PM-10 and Particulate Matter emission limits.
The owner of this equipment or the owner’s authorized agent shall provide written notice to the Director, not less than 30 days before a required stack test or performance evaluation of a continuous emission monitor. Results of the test shall be submitted in writing to the Director in the form of a comprehensive report within 6 weeks of the completion of the testing. 567 IAC 25.1(7)

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

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: 86-14

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-14</td>
<td>#2 Dextrose Tote Bagger</td>
<td>CE86-14: Baghouse</td>
<td>Crystalline Dextrose</td>
<td>10 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40%\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 98-A-615 567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 98-A-615 567 IAC 23.3(2)"a"

\(^{(1)}\) If greater than 25% opacity is observed other than at startup, shutdown, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

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

Stack Height, (ft, from the ground): 98
Stack Opening, (inches, dia.): 12
Exhaust Flow Rate (scfm): 2500
Exhaust Temperature (°F): 175
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 98-A-615

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☒ No ☐</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

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: 86-15

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU86-15A</td>
<td>#1 Whizzer Mechanical Separator</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU86-15B</td>
<td>#2 Whizzer Mechanical Separator</td>
<td>CE86-15: Dust Collector</td>
<td>Crystalline Dextrose</td>
<td>20 tons/hr.</td>
</tr>
<tr>
<td>EU86-15C</td>
<td>#3 Whizzer Mechanical Separator</td>
<td></td>
<td>Crystalline Dextrose</td>
<td>20 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

Pollutant: Opacity
Emission Limit(s): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 01-A-911-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 0.53 lb/hr.\(^{(2)}\), 1.06 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 01-A-911-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.53 lb/hr.\(^{(2)}\), 0.1 gr/dscf
Authority for Requirement: Iowa DNR Construction Permit 01-A-911-S1
567 IAC 23.3(2)"a"

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

\(^{(2)}\) Standard is expressed as the average of 3 runs
**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

- Stack Height, (ft, from the ground): 160
- Stack Opening, (inches, dia.): 15
- Exhaust Flow Rate (scfm): 3700
- Exhaust Temperature (°F): 100
- Discharge Style: Vertical Unobstructed
- Authority for Requirement: Iowa DNR Construction Permit 01-A-911-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

**Stack Testing Completed:**
- Pollutant – Particulate Matter
- Stack Test to be Completed on – 6/30/2004
- Test Method - Iowa Compliance Sampling Manual Method 5
  - Result Concentration – 0.003 gr/dscf
  - Result Emission Rate – 0.08 lb/hr.
  - Authority for Requirement – Iowa DNR Construction Permit 01-A-911

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)
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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)
# Utilities Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-1</td>
<td>EU19-1</td>
<td>Flood Pump No. 1</td>
<td>NA</td>
</tr>
<tr>
<td>19-2</td>
<td>EU19-2</td>
<td>Flood Pump No. 2</td>
<td>NA</td>
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<tr>
<td>19-3</td>
<td>EU19-3</td>
<td>Flood Pump No. 3</td>
<td>NA</td>
</tr>
<tr>
<td>208-1</td>
<td>EU208-1A2</td>
<td>No. 8 Boiler</td>
<td>90-A-067-S4</td>
</tr>
<tr>
<td></td>
<td>EU208-1B2</td>
<td>No. 9 Boiler</td>
<td>86-A-031-S1</td>
</tr>
<tr>
<td>300-1</td>
<td>EU300-1</td>
<td>Fire Pump No. 4</td>
<td>01-A-772-S1</td>
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<tr>
<td>300-2</td>
<td>EU300-2</td>
<td>Fire Pump No. 5</td>
<td>01-A-773-S1</td>
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<td>Fire Pump No. 6</td>
<td>01-A-774-S1</td>
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<tr>
<td>301-2</td>
<td>EU301-2</td>
<td>Fire Pump No. 7</td>
<td>01-A-775-S1</td>
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<tr>
<td>54-1</td>
<td>EU54-1B</td>
<td>Boiler No. 10</td>
<td>94-A-299</td>
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<tr>
<td>54-2</td>
<td>EU54-2</td>
<td>Boiler No. 13</td>
<td>96-A-542-S1</td>
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<tr>
<td>54-3</td>
<td>EU54-3</td>
<td>Boiler No. 14</td>
<td>96-A-543-S1</td>
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<td>55-1</td>
<td>EU55-1A</td>
<td>No. 11 Boiler</td>
<td>90-A-189</td>
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<td></td>
<td>EU55-1B</td>
<td>No. 12 Boiler</td>
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<tr>
<td>55-12</td>
<td>EU55-12</td>
<td>No. 2 Fly Ash Vacuum System Blower 1</td>
<td>84-A-109</td>
</tr>
<tr>
<td>55-13</td>
<td>EU55-13</td>
<td>No. 2 Fly Ash Vacuum System Blower 2</td>
<td>84-A-110</td>
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<tr>
<td>56-29</td>
<td>EU56-29</td>
<td>Boiler No. 1</td>
<td>85-A-048-S90</td>
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<tr>
<td>56-30</td>
<td>EU56-30</td>
<td>Boiler No. 2</td>
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<td>56-34</td>
<td>EU56-34</td>
<td>Coal Unloading And Transfer</td>
<td>81-A-125</td>
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<td>87-1</td>
<td>EU87-1</td>
<td>Coal Unloading And Transfer</td>
<td>81-A-124</td>
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<td>80-1</td>
<td>EU80-1</td>
<td>Fly Ash Storage</td>
<td>75-A-369-S</td>
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<tr>
<td>82-5</td>
<td>EU82-5</td>
<td>Lime Tanks (2)</td>
<td>NA</td>
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<tr>
<td>YRD-1</td>
<td>EUYRD-3A</td>
<td>No. 3 Boiler</td>
<td>85-A-048-S90</td>
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<td>EUYRD-4A</td>
<td>No. 4 Boiler</td>
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<td></td>
<td>EUYRD-5A</td>
<td>No. 5 Boiler</td>
<td></td>
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<tr>
<td></td>
<td>EUYRD-6C</td>
<td>No. 6 Boiler</td>
<td>72-A-111-S2</td>
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<tr>
<td></td>
<td>EUYRD-7D</td>
<td>No. 7 Boiler</td>
<td>72-A-112-S3</td>
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<tr>
<td>YRD-F98</td>
<td>EUYRD-F98</td>
<td>Coal Unloading</td>
<td>NA</td>
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<tr>
<td>YRD-F99</td>
<td>EUYRD-F99</td>
<td>Solid Waste Disposal - Fly Ash Piles</td>
<td>NA</td>
</tr>
<tr>
<td>UYRD-1</td>
<td>EUUYRD-1</td>
<td>Utilities Fuel Oil Tank</td>
<td>99-A-126</td>
</tr>
</tbody>
</table>
Emission Point ID Numbers: 19-1, 19-2, 19-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>19-1</td>
<td>EU19-1</td>
<td>Flood Pump No. 1</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>0.48 MMBtu/hr.</td>
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<tr>
<td>19-2</td>
<td>EU19-2</td>
<td>Flood Pump No. 2</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>0.48 MMBtu/hr.</td>
</tr>
<tr>
<td>19-3</td>
<td>EU19-3</td>
<td>Flood Pump No. 3</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>0.48 MMBtu/hr.</td>
</tr>
</tbody>
</table>

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): 40 %
Authority for Requirement: 567 IAC 23.3(2)"d"

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

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"(2)

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

Process throughput:
1. No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.
Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.
Authority for Requirement: 567 IAC 22.108(3)
**Monitoring Requirements**

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 208-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU208-1A2</td>
<td>No. 8 Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>257.8 MMBtu/hr.</td>
<td>90-A-067-S4</td>
</tr>
<tr>
<td>EU208-1B2</td>
<td>No. 9 Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>257.8 MMBtu/hr.</td>
<td>86-A-031-S1</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

- **Pollutant:** Opacity  
  Emission Limit(s): 20 %  
  Authority for Requirement: Iowa DNR Construction Permit 90-A-067-S4  
  567 IAC 23.3(2)"d"

- **Pollutant:** PM-10  
  Emission Limit(s): 0.77 lb/hr., 3.37 tons/yr.  
  Authority for Requirement: Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1

- **Pollutant:** Particulate Matter  
  Emission Limit(s): 0.6 lb/MMBtu  
  Authority for Requirement: Iowa DNR Construction Permit 90-A-067-S4  
  567 IAC 23.3(2)"b"

- **Pollutant:** Sulfur Dioxide (SO₂)  
  Emission Limit(s): 0.16 lb/hr., 0.70 tons/yr., 500 ppmv  
  Authority for Requirement: Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1  
  567 IAC 23.3(3)"e"

- **Pollutant:** Nitrogen Oxides (NOₓ)  
  Emission Limit(s): 20.6 lb/hr., 90.2 tons/yr.  
  Authority for Requirement: Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1

- **Pollutant:** VOC's  
  Emission Limit(s): 0.44 lb/hr., 1.93 tons/yr.  
  Authority for Requirement: Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1

- **Pollutant:** Carbon Monoxide (CO)  
  Emission Limit(s): 10.3 lb/hr., 45.1 tons/yr.  
  Authority for Requirement: Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Process throughput:
1. Boiler No. 8 shall operate on natural gas only.
2. The facility is required to do a permanent shutdown of this boiler by September 13, 2008.
Authority for Requirement: Iowa DNR Construction Permit 90-A-067-S4

NESHAP:
These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.
Authority for Requirement: 40 CFR 63 Subpart DDDDD
567 IAC 23.1(4)"dd"

Work Practice Standards:
1. The facility shall perform annual burner inspections and burner optimization on Boilers 8 and 9.
2. As part of the burner optimization, the flue gases shall be analyzed for % O₂, CO concentration (ppm), and NOₓ concentration (ppm).
3. The facility shall make any necessary burner adjustments, as indicated by the flue gas analysis, in order to maintain compliance with the emission limits for NOₓ and CO from the boilers.
4. The facility shall maintain records of the date of inspection/optimization as well as the flue gas analysis and any adjustments that are made to the burner.
Authority for Requirement: 567 IAC 22.108(14)
**Emission Point Characteristics**  
*The emission point shall conform to the specifications listed below.*

*Boilers 8 & 9 share the same physical stack, but there is a divider in the stack that separates their flows.*

- **Stack Height, (ft, from the ground):** 200  
- **Stack Opening, (inches, dia.):** 68  
- **Exhaust Flow Rate (scfm, per boiler):** 74,000  
- **Exhaust Temperature (°F):** 395  
- **Discharge Style:** Vertical Unobstructed  
- **Authority for Requirement:** Iowa DNR Construction Permits 90-A-067-S4 & 86-A-031-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

**Opacity:**  
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

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

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

**Authority for Requirement:** 567 IAC 22.108(3)
Emission Point ID Numbers: 300-1, 300-2, 301-1, 301-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>300-1</td>
<td>EU300-1</td>
<td>Fire Pump No. 4</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>460 Horsepower</td>
<td>01-A-772-S1</td>
</tr>
<tr>
<td>300-2</td>
<td>EU300-2</td>
<td>Fire Pump No. 5</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>460 Horsepower</td>
<td>01-A-773-S1</td>
</tr>
<tr>
<td>301-1</td>
<td>EU301-1</td>
<td>Fire Pump No. 6</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>460 Horsepower</td>
<td>01-A-774-S1</td>
</tr>
<tr>
<td>301-2</td>
<td>EU301-2</td>
<td>Fire Pump No. 7</td>
<td>NA</td>
<td>Diesel Fuel</td>
<td>460 Horsepower</td>
<td>01-A-775-S1</td>
</tr>
</tbody>
</table>

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): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1
567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.01 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1

Pollutant: Particulate Matter
Emission Limit(s): 1.01 lb/hr.\(^{(2)}\)
Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1

Pollutant: Sulfur Dioxide (SO\(_2\))
Emission Limit(s): 0.154 lb/hr.\(^{(2)}\), 2.5 lb/MMBtu
Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1
567 IAC 23.3(3)"b"\(^{(2)}\)

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

\(^{(2)}\) Standard is expressed as the average of 3 runs.
Operational Limits & Requirements

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

Hours of operation:
1. Each unit shall not operate in excess of 500 hours in any continuous twelve (12) month period.

Process throughput:
1. The fuel used in these units shall be diesel fuel with a maximum sulfur content of 0.05% wt.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. At the end of each month the number of hours of operation over the previous month shall be recorded. Additionally, the number of hours of operation over the previous twelve (12) months shall be recorded at the end of month.
2. A fuel certification showing the sulfur content of the fuel shall be kept for each fuel shipment received.

Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1

Emission Point Characteristics

Each emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 32*
Stack Opening, (inches, dia.): 6
Exhaust Flow Rate (scfm): 2486
Exhaust Temperature (°F): 904
Discharge Style: Vertical Unobstructed

Authority for Requirement: Iowa DNR Construction Permits 01-A-772-S1, 01-A-773-S1, 01-A-774-S1, 01-A-775-S1

* Construction Permit 01-A-772-S1 lists the stack height of 16.33 feet. The correct height is 32 feet. ADM shall apply for a construction permit modification to correct this.

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 54-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU54-1</td>
<td>Boiler No. 10</td>
<td>NA</td>
<td>Natural Gas</td>
<td>257.8 MMBtu/hr.</td>
</tr>
</tbody>
</table>

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:** PM-10  
  **Emission Limit(s):** 0.77 lb/hr., 3.37 tons/yr.  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1

- **Pollutant:** Particulate Matter  
  **Emission Limit(s):** 0.6 lb/MMBtu  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1  
  567 IAC 23.3(2)"b"

- **Pollutant:** Sulfur Dioxide (SO₂)  
  **Emission Limit(s):** 0.16 lb/hr, 0.70 tons/yr., 500 ppmv  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1  
  567 IAC 23.3(3)"e"

- **Pollutant:** Nitrogen Oxides (NOₓ)  
  **Emission Limit(s):** 20.6 lb/hr., 90.2 tons/yr.  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1

- **Pollutant:** VOC's  
  **Emission Limit(s):** 0.44 lb/hr., 1.93 tons/yr.  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1

- **Pollutant:** Carbon Monoxide (CO)  
  **Emission Limit(s):** 10.3 lb/hr., 45.1 tons/yr.  
  **Authority for Requirement:** Iowa DNR Construction Permit 94-A-299-S1
**Operational Limits & Requirements**

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

**NESHAP:**
This unit is an affected source under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable. Authority for Requirement: 40 CFR 63 Subpart DDDDD 567 IAC 23.1(4)"dd"

**Work Practice Standards:**
(a) The facility shall perform annual burner inspections and burner optimization on Boiler 10.
(b) As part of the burner optimization, the flue gases shall be analyzed for % O₂, CO concentration (ppm), and NOₓ concentration (ppm).
(c) The facility shall make any necessary burner adjustments, as indicated by the flue gas analysis, in order to maintain compliance with the emission limits for NOₓ and CO from the boilers.
(d) The facility shall maintain records of the date of inspection/optimization as well as the flue gas analysis and any adjustments that are made to the burner.

Authority for Requirement: 567 IAC 22.108(14)

**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 100
Stack Opening, (inches, dia.): 84
Exhaust Flow Rate (scfm): 76,000
Exhaust Temperature (°F): 350

Authority for Requirement: Iowa DNR Construction Permit 94-A-299-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
**Monitoring Requirements**

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

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>☐</td>
<td>☑</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>☐</td>
<td>☑</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers:  54-2 & 54-3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>54-2</td>
<td>EU54-2</td>
<td>Boiler No. 13</td>
<td>NA</td>
<td>Natural Gas</td>
<td>291 MMBtu/hr.</td>
<td>96-A-542-S1</td>
</tr>
<tr>
<td>54-3</td>
<td>EU54-3</td>
<td>Boiler No. 14</td>
<td>NA</td>
<td>Natural Gas</td>
<td>291 MMBtu/hr.</td>
<td>96-A-543-S1</td>
</tr>
</tbody>
</table>

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): 40%
Authority for Requirement: 567 IAC 23.3(2)"d"

Pollutant: PM-10
Emission Limit(s): 1.64 lb/hr., 7.2 tons/yr.
Authority for Requirement: Iowa DNR Construction Permits 96-A-542-S1 & 96-A-543-S1

Pollutant: Particulate Matter
Emission Limit(s): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOₓ)
Emission Limit(s): 4.50 lb/hr., 0.0155 lb/MMBtu.
Authority for Requirement: Iowa DNR Construction Permits 96-A-542-S1 & 96-A-543-S1
**Operational Limits & Requirements**

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

Process throughput:

1. These Boilers shall operate on natural gas only.

Authority for Requirement: Iowa DNR Construction Permits 96-A-542-S1 & 96-A-543-S1

**NESHAP:**

These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.

Authority for Requirement: 40 CFR 63 Subpart DDDDD

567 IAC 23.1(4)"dd"

**Emission Point Characteristics**

*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 140

Stack Opening, (inches, dia.): 84

Exhaust Flow Rate (acfm): 68,600

Exhaust Temperature (°F): 300

Authority for Requirement: Iowa DNR Construction Permits 96-A-542-S1 & 96-A-543-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**Monitoring Requirements**

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

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

Yes ☐ No ☒

**Facility Maintained Operation & Maintenance Plan Required?**

Yes ☐ No ☒

**Compliance Assurance Monitoring (CAM) Plan Required?**

Yes ☐ No ☒

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 55-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU55-1A</td>
<td>No. 11 Boiler</td>
<td>NA</td>
<td>Natural Gas</td>
<td>185.8 MMBtu/hr</td>
</tr>
<tr>
<td>EU55-1B</td>
<td>No. 12 Boiler</td>
<td></td>
<td>Natural Gas</td>
<td>185.8 MMBtu/hr</td>
</tr>
</tbody>
</table>

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): 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"

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

Process Throughput:
1. These boilers shall be used as standby units only and shall only be operated when one of the normally operated units is down.
2. These boilers shall burn natural gas only.
Authority for Requirement: Iowa DNR Construction Permit 90-A-189

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Record the hours that each boiler is operated.
Authority for Requirement: 567 IAC 11.108(3)
NESHAP:
These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.
Authority for Requirement: 40 CFR 63 Subpart DDDDD
567 IAC 23.1(4)"dd"

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 55-12 & 55-13

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-12</td>
<td>EU55-12</td>
<td>Fly Ash Vacuum System Blower 1</td>
<td>CE55-12: Dry Filter</td>
<td>Fly Ash</td>
<td>2.5 tons/hr.</td>
<td>84-A-109</td>
</tr>
<tr>
<td>55-13</td>
<td>EU55-13</td>
<td>Fly Ash Vacuum System Blower 2</td>
<td>CE55-13: Dry Filter</td>
<td>Fly Ash</td>
<td>2.5 tons/hr.</td>
<td>84-A-110</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Limit(s)</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opacity</td>
<td>40 %</td>
<td>567 IAC 23.3(2)&quot;d&quot;</td>
</tr>
<tr>
<td>Particulate Matter</td>
<td>7.58 lb/hr.(^{(1)})</td>
<td>Iowa DNR Construction Permits 84-A-109 &amp; 84-A-110</td>
</tr>
</tbody>
</table>

\(^{(1)}\) Based on a process weight of 2.5 tons/hr.

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

<table>
<thead>
<tr>
<th>Agency Approved Operation &amp; Maintenance Plan Required?</th>
<th>Yes ☐ No ☒</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required? (Required for CE55-12 and CE55-13)</td>
<td>Yes ☐ No ☒</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes ☐ No ☒</td>
</tr>
</tbody>
</table>

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 Numbers: 56-29 & 56-30**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-29</td>
<td>EU56-29</td>
<td>Boiler No. 1</td>
<td>NA</td>
<td>Natural Gas</td>
<td>142.6 MMBtu/hr.</td>
</tr>
<tr>
<td>56-30</td>
<td>EU56-30</td>
<td>Boiler No. 2</td>
<td>NA</td>
<td>Natural Gas</td>
<td>142.6 MMbtu/hr.</td>
</tr>
</tbody>
</table>

**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): 40 %  
  Authority for Requirement: 567 IAC 23.3(2)"d"

- **Pollutant:** Particulate Matter  
  Emission Limit(s): 0.6 lb/MMBtu  
  Authority for Requirement: 567 IAC 23.3(2)"b"

- **Pollutant:** Sulfur Dioxide (SO₂)  
  Emission Limit(s): 2.00 lb/MMBtu, (¹), 500 ppmv  
  Authority for Requirement: Iowa DNR Construction Permit 85-048-S90  
  567 IAC 23.3(3)"e"

  (¹) Based on a 24-hour rolling average.

**Operational Limits & Requirements**

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

**NESHAP:**

These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. According to Sec. 63.7506(b), existing large gaseous fuel and existing large liquid fuel units are only subject to the initial notification requirements in Sec. 63.9(b). As specified in Sec. 63.7545(b), an initial notification must be submitted no later than 120 days after November 12, 2004 (March 12, 2005). The initial notification must include the information listed in Sec. 63.7545(b)(1) and (b)(2), as applicable.

Authority for Requirement: 40 CFR 63 Subpart DDDDD  
567 IAC 23.1(4)"dd"
Compliance Plan
The owner/operator of this equipment shall comply with the applicable requirements listed below.

Iowa DNR Construction Permit 85-A-048-S90 was issued as part of Administrative Consent Order 90-AQ-10. This permit was written with the intention that these boilers would be converted from being natural gas fired to coal fired. These units were never converted to coal, therefore these boilers were not ducted through the 300 foot boiler stack and SO₂ Continuous Emission Monitors were not installed as required by permit 85-A-048-S90. These requirements were not included in the Title V permit because they do not apply to these units at this time. ADM Clinton intends to remove these units from service as part of the repowering project (DNR Construction Project 04-528).

Condition(s)
If these units are not decommissioned as part of the repowering project (September 13, 2008), ADM shall apply to modify Construction Permit 85-A-048-S90 to reflect the actual operating scenario for these units. If these units are decommissioned, ADM shall request to have permit 85-A-048-S90 rescinded.

Authority for Requirement: 567 IAC 22.108(15)

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 56-34

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU56-34</td>
<td>Coal Unloading and Transfer</td>
<td>CE56-34: Fabric Filter</td>
<td>Coal</td>
<td>50 tons/hr.</td>
</tr>
</tbody>
</table>

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): 20 %
Authority for Requirement: 40 CFR 60.252(c)
567 IAC 23.1(2)"v"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 81-A-124
567 IAC 23.3(2)"a"

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

Opacity:
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.
Agency Approved Operation & Maintenance Plan Required?  Yes ☒ No ☐

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

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: 87-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU87-1</td>
<td>Coal Unloading and Transfer</td>
<td>CE87-1: Fabric Filter</td>
<td>Coal</td>
<td>50 tons/hr.</td>
</tr>
</tbody>
</table>

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): 20%
Authority for Requirement: 40 CFR 60.252(c)
567 IAC 23.1(2)"v"

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permit 81-A-125
567 IAC 23.3(2)"a"

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

**Opacity:**
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.
<table>
<thead>
<tr>
<th>Requirement</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Approved Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Facility Maintained Operation &amp; Maintenance Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Compliance Assurance Monitoring (CAM) Plan Required?</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 80-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU80-1</td>
<td>Fly Ash Storage</td>
<td>CE80-1: Bin Vent Filter</td>
<td>Fly Ash</td>
<td>29,203 cubic feet</td>
</tr>
</tbody>
</table>

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: Iowa DNR Construction Permit 75-A-369-S
567 IAC 23.3(2)"d"

Pollutant: Particulate Matter
Emission Limit(s): 7.58 lb/hr.\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permit 75-A-369-S
567 IAC 23.3(2)"a"

\(^{(1)}\) Based on the process weight of 2.5 tons/hr.

**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: 82-5

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU82-5</td>
<td>Lime Tanks (2)</td>
<td>NA</td>
<td>Lime</td>
<td>85,000 lbs. (each)</td>
</tr>
</tbody>
</table>

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: YRD-1

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Monitoring Equipment 1</th>
<th>Monitoring Equipment 2</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-3A</td>
<td>No. 3 Boiler</td>
<td>CEYRD-3: ESP</td>
<td>Me208-2: SO₂ &amp; CO₂</td>
<td></td>
<td>Coal</td>
<td>142.6 MMBtu/hr</td>
<td>85-A-048-S90</td>
</tr>
<tr>
<td>EUYRD-4A</td>
<td>No. 4 Boiler</td>
<td>CEYRD-4: ESP</td>
<td></td>
<td>Me208-3: Opacity</td>
<td>Coal</td>
<td>142.6 MMBtu/hr</td>
<td>82-A-095-S90</td>
</tr>
<tr>
<td>EUYRD-5A</td>
<td>No. 5 Boiler</td>
<td></td>
<td></td>
<td></td>
<td>Coal</td>
<td>142.6 MBBtu/hr</td>
<td></td>
</tr>
<tr>
<td>EUYRD-6C</td>
<td>No. 6 Boiler</td>
<td>CEYRD-6: ESP</td>
<td>Me208-1: SO₂ &amp; CO₂</td>
<td></td>
<td>Coal</td>
<td>381.69 MBBtu/hr</td>
<td>72-A-111-S2</td>
</tr>
<tr>
<td>EUYRD-7</td>
<td>No. 7 Boiler</td>
<td>CEYRD-7: ESP</td>
<td></td>
<td></td>
<td>Coal</td>
<td>452.65 MBBtu/hr</td>
<td>72-A-112-S3</td>
</tr>
</tbody>
</table>

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): 0.8 lb/MBtu
Authority for Requirement: 567 IAC 23.3(2)"b"

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

EUYRD-3A, EUYRD-4A, EUYRD-5A
Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.2 lb/MMBtu(1)
Authority for Requirement: Consent Decree C.D. IL, #03-CV-2066
567 IAC 22.108(1)

(1) Based on a 30-day rolling average.
EUYRD-6C
Pollutant: PM-10
Emission Limit(s): 95.4 lb/hr., 417.8 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-111-S2

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1,145 lb/hr., 5,015 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-111-S2

Pollutant: Nitrogen Oxides (NOₓ)
Emission Limit(s): 383.6 lb/hr., 1,680.1 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-111-S2

Pollutant: VOC's
Emission Limit(s): 1.2 lb/hr., 5.26 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-111-S2

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 10.1 lb/hr., 44.2 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-111-S2

EUYRD-7
Pollutant: PM-10
Emission Limit(s): 115.1 lb/hr., 504.1 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-112-S3

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): 1,381.4 lb/hr., 6,050.5 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-112-S3

Pollutant: Nitrogen Oxides (NOₓ)
Emission Limit(s): 46.28 lb/hr., 2,027.1 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-112-S3

Pollutant: VOC's
Emission Limit(s): 1.4 lb/hr., 6.1 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-112-S3

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 12.2 lb/hr., 53.4 tons/yr.
Authority for Requirement: Iowa DNR Construction Permit 72-A-112-S3
Operational Limits & Requirements

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

Process throughput:
1. Steam production of Boiler 6 shall not exceed 315,000 lb/hr.
2. Steam Production of Boiler 7 shall not exceed 380,000 lb/hr.
3. The facility is required to do a permanent shutdown of Boiler 7 by September 13, 2008.


Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. Record the hourly steam production of Boilers 6 & 7.

Authority for Requirement: 567 IAC 22.108(3)

NESHAP:
These units are affected sources under 40 CFR 63 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. Per the definitions listed in Sec. 63.7575, these units fall into the existing "large solid fuel subcategory." The permittee shall comply with this subpart no later than September 13, 2007*. The permittee shall also meet the notification requirements in Sec. 63.7545 according to the schedule in Sec. 63.7545 and in Subpart A of 40 CFR Part 63. (Note: Some of the notifications must be submitted before compliance with the emission limits and work practice standards are required.)

* EPA Region 7 has granted ADM Corn Processing – Clinton a compliance extension until September 13, 2008 for these boilers. This approval is subject to the following conditions:
1. During the period of this compliance extension, ADM shall maintain contracts to purchase and build three new circulating fluidized bed (CFB) boilers which will replace these boilers.
2. By June 2005, or as soon as possible after receiving Prevention of Significant Deterioration (PSD) construction permits from the Iowa DNR (issued May 31, 2005), ADM shall begin on-site construction of the new CFB boilers.
3. By December 31, 2007, ADM shall complete the construction of the new Cogent CFB Boilers #1 and #2, including the installation of all emission control equipment on the new CFB boilers.
4. By May 1, 2008, ADM shall complete startup and system checks, and engineering testing of the new Cogen CFB Boilers #1 and #2.
5. By September 13, 2008, ADM shall achieve compliance with the requirements of 40 CFR Part 63 Subpart DDDDD for Boiler 3-7. A permanent shutdown of these boilers shall constitute compliance with Subpart DDDDD.
6. Within 30 calendar days of each of the milestones identified in conditions 2, 3, 4, and 5 above, ADM shall submit a progress report as provided by 40 CFR 63.6(i)(11). These reports should briefly summarize ADM's activities and compliance with the above schedule.
7. If ADM is unable to meet any of the above conditions by the dates specified, it shall notify EPQ Region 7 as soon as possible, but in no event longer than 14 calendar days of becoming aware of such inability. This notice must explain the delay and purpose of a revised completion date for affected conditions.

Authority for Requirement: 40 CFR Part 63 Subpart DDDDD
567 IAC 23.1(4)"dd"
EPA Region 7 letter dated March 10, 2005

Compliance Plan
The owner/operator of this equipment shall comply with the applicable requirements listed below.

With the exception(s) listed below, this point is in compliance with all applicable requirements and shall continue to comply with all such requirements. For those applicable requirements which will become effective during the permit term, this source will comply with such requirements in a timely manner.

Exception(s)
Stack testing for Carbon Monoxide was completed for Boilers 6 and 7 on July 15, 2004. This test shows that the combined Carbon Monoxide emissions from these two boilers exceed the emission limits set in construction permits 72-A-111-S2 and 72-A-112-S3. The facility must permanently shut down these boilers by September 13, 2008 (as required by EPA Region 7 letter dated March 10, 2005).

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

Stack Height, (ft, from the ground): 300
Stack Opening, (inches, dia.): 156
Exhaust Flow Rate (scfm): 113,500
Exhaust Temperature (°F): 325

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

Continuous Emissions Monitoring:
Monitoring Equipment – ME208-1
Pollutant – Sulfur Dioxide (SO₂) and Carbon Dioxide (CO₂)
Date of Initial System Calibration and Quality Assurance – October 1991

Monitoring Equipment – ME208-2
Pollutant – Sulfur Dioxide (SO₂) and Carbon Dioxide (CO₂)
Date of Initial System Calibration and Quality Assurance – October 1991

Monitoring Equipment – ME208-3
Pollutant - Opacity
Operational Specifications – 40 CFR 60, Appendix F
Date of Initial System Calibration and Quality Assurance – October 1991
Ongoing System Calibration/Quality Assurance - 40 CFR 60, Appendix F
Reporting & Record keeping - 40 CFR 60.7, 567 IAC 25
Authority for Requirement – 567 IAC 25.1

Installation, Evaluation and Operation of the Continuous Emission Monitoring Systems:
Each procedure under 40 C.F.R. 60.13 shall be followed for installation, evaluation and operation of the CEM systems.
1. Each continuous monitoring system shall be certified in accordance with procedures under Performance Specifications 2 and 3 of 40 C.F.R. Part 60, Appendix B.
2. Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of 40 C.F.R. Part 60, Appendix F.
3. The span value of the CEM shall be 200 percent of the maximum estimated hourly potential sulfur dioxide emissions from the fuel combusted.
4. Notification of the schedule for the relative accuracy determination required in Performance Specification 2 shall be provided to the Department in writing not later than fifteen (15) days before the test is performed. Such notice shall include, at a minimum, the time, the place and the name of the person who will conduct the test. Unless specifically waived by the Department, a pretest meeting shall be held no later than fifteen (15) days prior to conducting the compliance demonstration. A representative of the Department shall be permitted to witness the tests.

Reporting & Record keeping:
Records shall be kept on site for at least five years and shall be available for inspection by the Department.
1. The one-hour average sulfur dioxide emission rates measured by the CEM required by this permit.
2. Identification of the operating days for which sulfur dioxide emission data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
3. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding the data.
4. Identification of the times when the sulfur dioxide concentration exceeded the full span of the continuous monitoring system.
5. Description of any modifications or maintenance made to the continuous monitoring system that could affect the ability of the C.E.M. to comply with 40 C.F.R. Part 60, Appendix B, Performance Specifications 2 and 3.
6. Results of the daily continuous monitoring system drift tests and quarterly accuracy assessments conducted in accordance with 40 C.F.R. Part 60, Appendix F.

**Reporting Requirements:**
The following operation, emissions and control reporting requirements of this condition shall begin the calendar quarter in which the CEM becomes operational, covering the entire quarter or portion thereof. This information shall be reported on the forms supplied by the Department.
1. The magnitude of excess emissions computed, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emission.
2. Specific identification of each period of excess emissions that occurs during startups and shutdowns of the affected facility. The nature and cause of any excess emission and the corrective action taken shall be reported.
3. The date and time identifying each period during which the CEM was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
4. When no excess emissions have occurred or the CEM has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
5. The results of the quarterly accuracy assessments as required by 40 C.F.R. Part 60, Appendix F.

Authority for Requirement: Iowa DNR Construction Permit 85-A-048-S90

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

**Agency Approved Operation & Maintenance Plan Required?**
Yes ☒ No ☐
(Required for CEYRD3, CEYRD-4, CEYRD-6, CEYRD-7)

**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: YRD-F98

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-F98</td>
<td>Coal Unloading</td>
<td>NA</td>
<td>Coal</td>
<td>300 tons/hr.</td>
</tr>
</tbody>
</table>

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): 20 %  
Authority for Requirement: 40 CFR 60.252(c)  
567 IAC 23.1(2)"v"

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

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

Opacity:  
The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity >20% is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.

Maintain a written record of the observation and any action resulting from the observation for a minimum of five years.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: YRD-F99

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUYRD-F99</td>
<td>Solid Waste Disposal - Fly Ash Piles</td>
<td>NA</td>
<td>Fly Ash</td>
<td>8 tons/hr.</td>
</tr>
</tbody>
</table>

Applicable Requirements

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: UYRD-1

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUUYRD-1</td>
<td>Utilities Fuel Oil Tank</td>
<td>NA</td>
<td>Fuel Oil</td>
<td>11,900 gallons</td>
</tr>
</tbody>
</table>

**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 for this unit at this time.

**Operational Limits & Requirements**

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

Process throughput:
1. Limited to using the vessel for number 2 fuel oil.

Reporting & Record keeping:

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

1. Maintain records of the date and time the storage vessel (EU – UYRD – 1) is filled.
2. Maintain records of the quantity of diesel fuel supplied during each fill period into storage vessel EU – UYRD - 1.

Authority for Requirement: Iowa DNR Construction Permit 99-A-126
**Emission Point Characteristics**
*The emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 11  
Stack Opening, (inches, dia.): 4  
Exhaust Flow Rate (scfm): NA  
Exhaust Temperature (°F): 70  
Discharge Style: Downward  
Authority for Requirement: Iowa DNR Construction Permit 99-A-126

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

**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)
## Wastewater Equipment List

<table>
<thead>
<tr>
<th>Emission Point Number</th>
<th>Emission Unit Number</th>
<th>Emission Unit Description</th>
<th>IDNR Construction Permit Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>217-18</td>
<td>EU217-18</td>
<td>Wastewater Collection Basin</td>
<td>04-A-168-S1</td>
</tr>
<tr>
<td>501-1</td>
<td>EU501-1</td>
<td>#1 Pit</td>
<td>04-A-180</td>
</tr>
<tr>
<td>501-2</td>
<td>EU501-2</td>
<td>#0, #2, #3 Pit</td>
<td>04-A-181</td>
</tr>
<tr>
<td>501-3</td>
<td>EU501-3</td>
<td>#4, #5 Pit</td>
<td>04-A-182</td>
</tr>
<tr>
<td>504-1</td>
<td>EU504-1</td>
<td>Oil Heater #1</td>
<td>04-A-183</td>
</tr>
<tr>
<td>504-2</td>
<td>EU504-2</td>
<td>Oil Heater #2</td>
<td>04-A-184</td>
</tr>
<tr>
<td>504-5</td>
<td>EU504-5</td>
<td>Biomass Storage Bin #1</td>
<td>04-A-185-S1</td>
</tr>
<tr>
<td>504-6</td>
<td>EU504-8</td>
<td>Aspirated Bulk Loading Spout #1</td>
<td>04-A-186-S1</td>
</tr>
<tr>
<td>504-7</td>
<td>EU504-9</td>
<td>Aspirated Bulk Loading Spout #2</td>
<td>04-A-187-S1</td>
</tr>
<tr>
<td>WW-F1</td>
<td>EUWW-F1</td>
<td>Wastewater Aeration Basin &quot;A&quot;</td>
<td>04-A-169</td>
</tr>
<tr>
<td>WW-F4</td>
<td>EUWW-F4</td>
<td>Wastewater Aeration Basin &quot;D&quot;</td>
<td>04-A-172-S1</td>
</tr>
<tr>
<td>WW-F5</td>
<td>EUWW-F5</td>
<td>Wastewater Aeration Basin &quot;E&quot;</td>
<td>04-A-173</td>
</tr>
<tr>
<td>WW-F6</td>
<td>EUWW-F6</td>
<td>Biotatron Basin</td>
<td>04-A-174-S1</td>
</tr>
<tr>
<td>WW-F7</td>
<td>EUWW-F7</td>
<td>Wastewater Aeration Basin &quot;F&quot;</td>
<td>04-A-175-S1</td>
</tr>
<tr>
<td>WW-F8</td>
<td>EUWW-F8</td>
<td>Clarifier &quot;A&quot;</td>
<td>04-A-176</td>
</tr>
<tr>
<td>WW-F9</td>
<td>EUWW-F9</td>
<td>Clarifier &quot;B&quot;</td>
<td>04-A-177</td>
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<tr>
<td>WW-F10</td>
<td>EUWW-F10</td>
<td>Clarifier &quot;C&quot;</td>
<td>04-A-178-S1</td>
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<tr>
<td>WW-F11</td>
<td>EUWW-F11</td>
<td>DAF Clarifier</td>
<td>04-A-179-S1</td>
</tr>
<tr>
<td>WW-F2</td>
<td>EUWW-F2</td>
<td>Wastewater Aeration Basin &quot;B&quot;</td>
<td>04-A-170</td>
</tr>
<tr>
<td></td>
<td>EU504-3</td>
<td>Biomass Dryer #1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-4</td>
<td>Biomass Dryer #2</td>
<td></td>
</tr>
<tr>
<td>WW-F3</td>
<td>EUWW-F3</td>
<td>Wastewater Aeration Basin &quot;C&quot;</td>
<td>04-A-171-S1</td>
</tr>
<tr>
<td></td>
<td>EU504-3</td>
<td>Biomass Dryer #1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-4</td>
<td>Biomass Dryer #2</td>
<td></td>
</tr>
<tr>
<td>YRD-EQ1</td>
<td>EUYRD-EQ1</td>
<td>Equalization Tank #1</td>
<td>03-A-1179-S1</td>
</tr>
<tr>
<td>YRD-EQ2</td>
<td>EUYRD-EQ2</td>
<td>Equalization Tank #2</td>
<td>03-A-1180-S1</td>
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</table>
Emission Point ID Number: 217-18

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU217-18</td>
<td>Wastewater Collection Basin</td>
<td>CE217-18: Scrubber</td>
<td>Wastewater</td>
<td>847,000 gallons</td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.04 lb/hr.⁽¹⁾, 500 ppmv
Authority for Requirement: Iowa DNR Construction Permit 04-A-168-S1
567 IAC 23.3(3)"e"

⁽¹⁾ Standard is expressed as the average of 3 runs.

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 41
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 2900
Exhaust Temperature (°F): 122
Discharge Style: Vertical Unobstructed
Authority for Requirement: Iowa DNR Construction Permit 04-A-168-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
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 Numbers: 501-1, 501-2, 501-3**

**Associated Equipment**

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>501-1</td>
<td>EU501-1</td>
<td>#1 Pit</td>
<td>NA</td>
<td>Wastewater</td>
<td>26,900 gallons</td>
<td>04-A-180</td>
</tr>
<tr>
<td>501-2</td>
<td>EU501-2</td>
<td>#0, #2, #3 Pit</td>
<td>NA</td>
<td>Wastewater</td>
<td>55,900 gallons (each)</td>
<td>04-A-181</td>
</tr>
<tr>
<td>501-3</td>
<td>EU501-3</td>
<td>#4, #5 Pt</td>
<td>NA</td>
<td>Wastewater</td>
<td>33,000 gallons (each)</td>
<td>04-A-182</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

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

There are no applicable emission limits for these emission units at this time.

**Emission Point Characteristics**

*The emission point shall conform to the specifications listed below.*

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height, (ft, from the ground)</th>
<th>Stack Opening, (inches, dia.)</th>
<th>Exhaust Flow Rate (scfm)</th>
<th>Exhaust Temperature (°F)</th>
<th>Discharge Style</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>501-1</td>
<td>32</td>
<td>18</td>
<td>3725</td>
<td>70</td>
<td>Horizontal</td>
<td>04-A-180</td>
</tr>
<tr>
<td>501-2</td>
<td>30</td>
<td>24</td>
<td>3858</td>
<td>70</td>
<td>Horizontal</td>
<td>04-A-181</td>
</tr>
<tr>
<td>501-3</td>
<td>31</td>
<td>18</td>
<td>3725</td>
<td>70</td>
<td>Vertical Unobstructed</td>
<td>04-A-182</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: 504-1 & 504-2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>504-1</td>
<td>EU504-1</td>
<td>Oil Heater #1</td>
<td>NA</td>
<td>Natural Gas</td>
<td>12 MMBtu/hr</td>
<td>04-A-183</td>
</tr>
<tr>
<td>504-2</td>
<td>EU504-2</td>
<td>Oil Heater #2</td>
<td>NA</td>
<td>Natural Gas</td>
<td>12 MMBtu/hr</td>
<td>04-A-184</td>
</tr>
</tbody>
</table>

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): 40 %  
  567 IAC 23.3(2)"d"

- **Pollutant:** Particulate Matter  
  Emission Limit(s): 0.6 lb/MMBtu  
  567 IAC 23.3(2)"b"

- **Pollutant:** Sulfur Dioxide (SO2)  
  Emission Limit(s): 500 ppmv  
  567 IAC 23.3(3)"e"

**Operational Limits & Requirements**

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

Process throughput:

1. These units shall be fired by natural gas only. Prior to burning any other fuel in these units, the permittee shall apply for and obtain new construction permits from the Iowa DNR. The maximum heat input of these heaters is 12.0 MMBTU/hr.
Reporting & Record keeping:
*Records shall be kept on site for at least five years and shall be available for inspection by the Department.*

1. The permittee shall record and maintain records of the amount of natural gas combusted in this emissions unit during each month.

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567 IAC 23.1(2)"Ill"

NESHAP:
These units are affected sources under 40 CFR 6 Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters. Per the definitions listed in Sec. 63.7575, these units fall into the new "large gaseous subcategory."

**Sec. 63.7495 When do I have to comply with this subpart?**
(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

**Sec. 63.7500 What emission limits, work practice standards, and operating limits must I meet?**
(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under § 63.7507.

**TABLE 1—EMISSION LIMITS AND WORK PRACTICE STANDARDS**
As stated in § 63.7500, you must comply with the following applicable emission limits and work practice standards:

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory</th>
<th>For the following pollutants</th>
<th>You must meet the following emission limits and work practice standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. New or reconstructed large gaseous fuel</td>
<td>Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis corrected to 3 percent oxygen, (3-run average for units less than 100 MMBtu/hr).</td>
</tr>
</tbody>
</table>

(b) As provided in § 63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

**Sec. 63.7505 What are my general requirements for complying with this subpart?**
(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.
(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in Sec. 63.6(e)(1)(i).
(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to Sec. 63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.
(e) If you have an applicable emission limit or work practice standard, you must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in Sec. 63.6(e)(3).
Sec. 63.7510 What are my initial compliance requirements and by what date must I conduct them?

(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide according to Table 5 to this subpart. If your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, your initial compliance demonstration is conducting a performance evaluation of your continuous emission monitoring system for carbon monoxide according to Sec. 63.7525(a).

TABLE 5 —PERFORMANCE TESTING REQUIREMENTS
As stated in § 63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>5. Carbon Monoxide</th>
<th>a. Select the sampling ports location and the number of traverse points.</th>
<th>Method 1 in appendix A to part 60 of this chapter.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b. Determine oxygen and carbon dioxide concentrations of the stack gas.</td>
<td>Method 3A or 3B in appendix A to part 60 of this chapter, or ASTM D6522–00 (IBR, see § 63.14(b)), or ASME PTC 19, Part 10 (1981) (IBR, see § 63.14(i)).</td>
</tr>
<tr>
<td></td>
<td>c. Measure the moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>d. Measure the carbon monoxide emission concentration.</td>
<td>Method 10, 10A, or 10B in appendix A to part 60 of this chapter, or ASTM D6522–00 (IBR, see § 63.14(b)) when the fuel is natural gas.</td>
</tr>
</tbody>
</table>

(e) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003 and November 12, 2004, you must demonstrate initial compliance with either the proposed emission limits and work practice standards or the promulgated emission limits and work practice standards no later than 180 days after November 12, 2004 or within 180 days after startup of the source, whichever is later, according to Sec. 63.7(a)(2)(ix).

(f) If your new or reconstructed affected source commenced construction or reconstruction between January 13, 2003, and November 12, 2004, and you chose to comply with the proposed emission limits and work practice standards when demonstrating initial compliance, you must conduct a second compliance demonstration for the promulgated emission limits and work practice standards within 3 years after November 12, 2004 or within 3 years after startup of the affected source, whichever is later.

(g) If your new or reconstructed affected source commences construction or reconstruction after November 12, 2004, you must demonstrate initial compliance with the promulgated emission limits and work practice standards no later than 180 days after startup of the source.

Sec. 63.7515 When must I conduct subsequent performance tests or fuel analyses?

(a) You must conduct all applicable performance tests according to Sec. 63.7520 on an annual basis, unless you follow the requirements listed in paragraphs (b) through (d) of this section. Annual performance tests must be completed between 10 and 12 months after the previous
performance test, unless you follow the requirements listed in paragraphs (b) through (d) of this section.

(e) If you have an applicable work practice standard for carbon monoxide and your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, you must conduct annual performance tests for carbon monoxide according to Sec. 63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

(f) You must conduct a fuel analysis according to Sec. 63.7521 for each type of fuel burned no later than 5 years after the previous fuel analysis for each fuel type. If you burn a new type of fuel, you must conduct a fuel analysis before burning the new type of fuel in your boiler or process heater. You must still meet all applicable continuous compliance requirements in Sec. 63.7540.

(g) You must report the results of performance tests and fuel analyses within 60 days after the completion of the performance tests or fuel analyses. This report should also verify that the operating limits for your affected source have not changed or provide documentation of revised operating parameters established according to Sec. 63.7530 and Table 7 to this subpart, as applicable. The reports for all subsequent performance tests and fuel analyses should include all applicable information required in Sec. 63.7550.

Sec. 63.7520 What performance tests and procedures must I use?

(a) You must conduct all performance tests according to Sec. 63.7(c), (d), (f), and (h). You must also develop a site-specific test plan according to the requirements in Sec. 63.7(c) if you elect to demonstrate compliance through performance testing.

(b) You must conduct each performance test according to the requirements in Table 5 to this subpart.

(d) You must conduct each performance test under the specific conditions listed in Tables 5 and 7 to this subpart. You must conduct performance tests at the maximum normal operating load while burning the type of fuel or mixture of fuels that have the highest content of chlorine, mercury, and total selected metals, and you must demonstrate initial compliance and establish your operating limits based on these tests. These requirements could result in the need to conduct more than one performance test.

(e) You may not conduct performance tests during periods of startup, shutdown, or malfunction.

(f) You must conduct three separate test runs for each performance test required in this section, as specified in Sec. 63.7(e)(3). Each test run must last at least 1 hour.

Sec. 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to Sec. 63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to Sec. 63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.
Sec. 63.7540 How do I demonstrate continuous compliance with the emission limits and work practice standards?

(a) You must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that applies to you according to the methods specified in Table 8 to this subpart and paragraphs (a)(1) through (10) of this section.

(1) Following the date on which the initial performance test is completed or is required to be completed under Sec. Sec. 63.7 and 63.7510, whichever date comes first, you must not operate above any of the applicable maximum operating limits or below any of the applicable minimum operating limits listed in Tables 2 through 4 to this subpart at all times except during periods of startup, shutdown and malfunction. Operating limits do not apply during performance tests. Operation above the established maximum or below the established minimum operating limits shall constitute a deviation of established operating limits.

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in Sec. 63.7550.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in Sec. 63.7505(e).

(d) Consistent with Sec. Sec. 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator's satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in Sec. 63.6(e).

Sec. 63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in Sec. Sec. 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(c) As specified in Sec. 63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(d) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(e) If you are required to conduct an initial compliance demonstration as specified in Sec. 63.7530(a), you must submit a Notification of Compliance Status according to Sec. 63.9(h)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to Sec. 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.
(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

Sec. 63.7550 What reports must I submit and when?
(a) You must submit each report in Table 9 to this subpart that applies to you.
(b) Unless the EPA Administrator has approved a different schedule for submission of reports under Sec. 63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in Sec. 63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in Sec. 63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in Sec. 63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(ii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.
(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.
(2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of Sec. 63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of TSM input, using Equation 6 of Sec. 63.7530, that demonstrates that your source is still within its maximum TSM input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of TSM emission rate using Equation 10 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for TSM emissions (for boilers or process heaters that demonstrate compliance through fuel analysis). If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of Sec. 63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of Sec. 63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of Sec. 63.7530, the maximum TSM input operating limit using Equation 6 of Sec. 63.7530, or the maximum mercury input operating limit using Equation 7 of Sec. 63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in Sec. 63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs, including CEMS, COMS, and CPMS, were out of control as specified in Sec. 63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.
(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.
(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.
(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.
(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(f) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard specified in Table 1 to this subpart, and you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in Sec. 63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.
(2) Identification of the affected unit.
(3) Reason you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.
(4) Type of alternative fuel that you intend to use.
(5) Dates when the alternative fuel use is expected to begin and end.
**TABLE 9—REPORTING REQUIREMENTS**

As stated in § 63.7550, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>You must submit a(n)</th>
<th>The report must contain</th>
<th>You must submit the report</th>
</tr>
</thead>
</table>
| 1. Compliance report  | a. Information required in § 63.7550(c)(1) through (11); and  
                        b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in § 63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and  
                        c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in § 63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in § 63.8(c)(7), the report must contain the information in § 63.7550(e); and  
                        d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i)  
                        Semiannually according to the requirements in § 63.7550(b). |
| 2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard. | a. Actions taken for the event; and  
                        b. The information in § 63.10(d)(5)(ii)  
                        i. By fax or telephone within 2 working days after starting actions inconsistent with the plan; and  
                        ii. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. |
Sec. 63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.
   (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in Sec. 63.10(b)(2)(xiv).
   (2) The records in Sec. 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
   (3) Records of performance tests, fuel analyses, or other compliance demonstrations, performance evaluations, and opacity observations as required in Sec. 63.10(b)(2)(viii).

Sec. 63.7560 In what form and how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to Sec. 63.10(b)(1).
(b) As specified in Sec. 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
(c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to Sec. 63.10(b)(1). You can keep the records off site for the remaining 3 years.

Authority for Requirement: 40 CFR 63 Subpart DDDDD 567 IAC 23.1(4)"dd"

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

Stack Height, (ft, from the ground): 65
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 3500
Exhaust Temperature (°F): 550
Discharge Style: Vertical Obstructed

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.
Monitoring Requirements
The owner/operator of this equipment shall comply with the monitoring requirements listed below.

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

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

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Numbers: 504-5, 504-6, 504-7

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>504-5</td>
<td>EU504-5</td>
<td>Biomass Storage Bin #1</td>
<td></td>
<td>Biomass</td>
<td>1.23 tons/hr.</td>
<td>04-A-185-S1</td>
</tr>
<tr>
<td></td>
<td>EU504-8</td>
<td>Aspirated Bulk Loading Spout #1</td>
<td>CE504-5: Fabric Filter</td>
<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-9</td>
<td>Aspirated Bulk Loading Spout #2</td>
<td></td>
<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
<tr>
<td>504-6</td>
<td>EU504-6</td>
<td>Biomass Storage Bin #2</td>
<td></td>
<td>Biomass</td>
<td>1.23 tons/hr.</td>
<td>04-A-186-S1</td>
</tr>
<tr>
<td></td>
<td>EU504-8</td>
<td>Aspirated Bulk Loading Spout #1</td>
<td>CE504-6: Fabric Filter</td>
<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-9</td>
<td>Aspirated Bulk Loading Spout #2</td>
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<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
<tr>
<td>504-7</td>
<td>EU504-7</td>
<td>Biomass Storage Bin #3</td>
<td></td>
<td>Biomass</td>
<td>1.23 tons/hr.</td>
<td>04-A-187-S1</td>
</tr>
<tr>
<td></td>
<td>EU504-8</td>
<td>Aspirated Bulk Loading Spout #1</td>
<td>CE504-7: Fabric Filter</td>
<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-9</td>
<td>Aspirated Bulk Loading Spout #2</td>
<td></td>
<td>Biomass</td>
<td>50 tons/hr.</td>
<td></td>
</tr>
</tbody>
</table>

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): 40 %\(^{(1)}\)
Authority for Requirement: Iowa DNR Construction Permits 04-A-185-S1, 04-A-186-S1, 04-A-187-S1
567 IAC 23.3(2)”d”

Pollutant: Particulate Matter
Emission Limit(s): 0.2 lb/hr.\(^{(2)}\), 0.1 gr/scf
Authority for Requirement: Iowa DNR Construction Permits 04-A-185-S1, 04-A-186-S1, 04-A-187-S1
567 IAC 23.3(2)”a”

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

\(^{(2)}\) Standard is expressed as the average of 3 runs.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Work practice standards:
1. Particulate emissions from the truck loadout stations shall be captured and aspirated into one of the three biomass storage bins.


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

Stack Height, (ft, from the ground): 60
Stack Opening, (inches, dia.): 7
Exhaust Flow Rate (scfm): 1078
Exhaust Temperature (°F): 110
Discharge Style: Horizontal


The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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 ☒
(Required for CE504-5, CE504-6, and CE504-7)

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 Numbers: WW-F1, WW-F4, WW-F5, WW-F6, WW-F7, WW-F8, WW-F9, WW-F10, WW-F11

### Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-F1</td>
<td>EUWW-F1</td>
<td>Wastewater Aeration Basin A</td>
<td>NA</td>
<td>Wastewater</td>
<td>1,280,000 gallons</td>
<td>04-A-169</td>
</tr>
<tr>
<td>WW-F4</td>
<td>EUWW-F4</td>
<td>Wastewater Aeration Basin D</td>
<td>NA</td>
<td>Wastewater</td>
<td>1,560,000 gallons</td>
<td>04-A-172-S1</td>
</tr>
<tr>
<td>WW-F5</td>
<td>EUWW-F5</td>
<td>Wastewater Aeration Basin E</td>
<td>NA</td>
<td>Wastewater</td>
<td>580,000 gallons</td>
<td>04-A-173</td>
</tr>
<tr>
<td>WW-F6</td>
<td>EUWW-F6</td>
<td>BiotaTron Tank</td>
<td>NA</td>
<td>Wastewater</td>
<td>950,000 gallons</td>
<td>04-A-174-S1</td>
</tr>
<tr>
<td>WW-F7</td>
<td>EUWW-F7</td>
<td>Wastewater Aeration Basin F</td>
<td>NA</td>
<td>Wastewater</td>
<td>1,700,000 gallons</td>
<td>04-A-175-S1</td>
</tr>
<tr>
<td>WW-F8</td>
<td>EUWW-F8</td>
<td>Clarifier A</td>
<td>NA</td>
<td>Wastewater</td>
<td>430,000 gallons</td>
<td>04-A-176</td>
</tr>
<tr>
<td>WW-F9</td>
<td>EUWW-F9</td>
<td>Clarifier B</td>
<td>NA</td>
<td>Wastewater</td>
<td>430,000 gallons</td>
<td>04-A-177</td>
</tr>
<tr>
<td>WW-F10</td>
<td>EUWW-F10</td>
<td>Clarifier C</td>
<td>NA</td>
<td>Wastewater</td>
<td>430,000 gallons</td>
<td>04-A-178-S1</td>
</tr>
<tr>
<td>WW-F11</td>
<td>EUWW-F11</td>
<td>DAF Clarifier</td>
<td>NA</td>
<td>Wastewater</td>
<td>490,000 gallons</td>
<td>04-A-179-S1</td>
</tr>
</tbody>
</table>

### 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 for these emission units at this time.
**Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Stack Height, (ft, from the ground)</th>
<th>Stack Opening, (inches, dia.) (1)</th>
<th>Exhaust Flow Rate (scfm)</th>
<th>Exhaust Temperature (°F)</th>
<th>Discharge Style</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-F1</td>
<td>11</td>
<td>115</td>
<td>3725</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-169</td>
</tr>
<tr>
<td>WW-F4</td>
<td>14.5</td>
<td>115</td>
<td>3724</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-172-S1</td>
</tr>
<tr>
<td>WW-F5</td>
<td>18.5</td>
<td>75</td>
<td>5133</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-173</td>
</tr>
<tr>
<td>WW-F6</td>
<td>17</td>
<td>90</td>
<td>3691</td>
<td>100</td>
<td>Vertical Unobstructed</td>
<td>04-A-174-S1</td>
</tr>
<tr>
<td>WW-F7</td>
<td>30</td>
<td>102</td>
<td>5814</td>
<td>100</td>
<td>Vertical Unobstructed</td>
<td>04-A-175-S1</td>
</tr>
<tr>
<td>WW-F8</td>
<td>6.5</td>
<td>75</td>
<td>NA</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-176</td>
</tr>
<tr>
<td>WW-F9</td>
<td>6.5</td>
<td>75</td>
<td>NA</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-177</td>
</tr>
<tr>
<td>WW-F10</td>
<td>6.5</td>
<td>75</td>
<td>NA</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-178-S1</td>
</tr>
<tr>
<td>WW-F11</td>
<td>8</td>
<td>75</td>
<td>NA</td>
<td>95</td>
<td>Vertical Unobstructed</td>
<td>04-A-179-S1</td>
</tr>
</tbody>
</table>

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

(1) There is no stack on these emission units, emissions are released from the top of the tanks.

**Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: WW-F2 & WW-F3

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>WW-F2</td>
<td>EUWW-F2</td>
<td>Wastewater Aeration Basin B</td>
<td>NA</td>
<td>Wastewater</td>
<td>1,280,000 gallons</td>
<td>04-A-170</td>
</tr>
<tr>
<td></td>
<td>EU504-3</td>
<td>Biomass Dryer #1</td>
<td></td>
<td>Biomass</td>
<td>100 tons/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-4</td>
<td>Biomass Dryer #2</td>
<td></td>
<td>Biomass</td>
<td>100 tons/day</td>
<td></td>
</tr>
<tr>
<td>WW-F3</td>
<td>EUWW-F3</td>
<td>Wastewater Aeration Basin C</td>
<td>NA</td>
<td>Wastewater</td>
<td>1,440,000 gallons</td>
<td>04-A-171-S1</td>
</tr>
<tr>
<td></td>
<td>EU504-3</td>
<td>Biomass Dryer #1</td>
<td></td>
<td>Biomass</td>
<td>100 tons/day</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EU504-4</td>
<td>Biomass Dryer #2</td>
<td></td>
<td>Biomass</td>
<td>100 tons/day</td>
<td></td>
</tr>
</tbody>
</table>

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: Sulfur Dioxide (SO₂)
Emission Limit(s): 1.0 lb/hr.⁽¹⁾, 500 ppmv
Authority for Requirement: Iowa DNR Construction Permits 04-A-170 & 04-A-171-S1
567 IAC 23.3(3)"e"

⁽¹⁾ Standard is expressed as the average of 3 runs.

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

Work practice standards:
1. The biomass dryers #1 and #2 shall vent into an aeration basin, either B-Basin (EP-WW-F2) or C-Basin (EP-WW-F3). Prior to exhausting into the aeration basin, emissions from the dryer shall be controlled by a sluiced crossover duct, a multi-stage spray tower, and a liquid ring compressor.
Authority for Requirement: Iowa DNR Construction Permits 04-A-170 & 04-A-171-S1
**Emission Point Characteristics**  
*Each emission point shall conform to the specifications listed below.*

Stack Height, (ft, from the ground): 11  
Stack Opening, (inches, ft): 115\(^{(1)}\)  
Exhaust Flow Rate (scfm): 7059\(^{(2)}\)  
Exhaust Temperature (°F): 95  
Discharge Style: Vertical Unobstructed  
Authority for Requirement: Iowa DNR Construction Permits 04-A-170 & 04-A-171-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

\(^{(1)}\) There is no stack on this emissions unit; emissions released from top of basin.  
\(^{(2)}\) The exhaust flow rate from each dryer into the aeration basin is 339 scfm.

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Numbers: YRD-EQ1 & YRD-EQ2

Associated Equipment

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Control Equipment</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>YRD-EQ1</td>
<td>EUYRD-EQ1</td>
<td>Equalization Tank #1</td>
<td>NA</td>
<td>Wastewater</td>
<td>2,500,000 gallons</td>
<td>03-A-1179-S1</td>
</tr>
<tr>
<td>YRD-EQ2</td>
<td>EUYRD-EQ2</td>
<td>Equalization Tank #2</td>
<td>NA</td>
<td>Wastewater</td>
<td>2,500,000 gallons</td>
<td>03-A-1180-S1</td>
</tr>
</tbody>
</table>

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 for these emission units at this time.

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

Stack Height, (ft, from the ground): 58
Stack Opening, (inches, dia.): 20
Exhaust Flow Rate (scfm): Displacement
Exhaust Temperature (°F): 122
Discharge Style: Downward
Authority for Requirement: Iowa DNR Construction Permits 03-A-1179-S1 & 03-A-1180-S1

The temperature and flow rate are intended to be representative and characteristic of the design of the permitted emission point. The Department recognizes that the temperature and flow rate may vary with changes in the process and ambient conditions. If it is determined that any of the emission point design characteristics are different than the values stated above, the owner/operator must notify the Department and obtain a permit amendment, if required.

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

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

Authority for Requirement: 567 IAC 22.108(3)
IV. General Conditions
This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply
1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the Applicable Requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source's potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"

G2. Permit Expiration
1. Except as provided in 567 IAC 22.104, the expiration of this permit terminates the permittee's right to operate unless a timely and complete application has been submitted for renewal. Any testing required for renewal shall be completed before the application is submitted. 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 present or mail the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, 7900 Hickman Rd, Suite #1, Urbandale, Iowa 50322, 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 EPA Region VII, Attention: Chief of Air Permits, 901 N. 5th St., Kansas City, KS 66101. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents
Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)

G4. Annual Compliance Certification
By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with Applicable Requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for
determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report
By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee
1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The following forms shall be submitted annually by March 31 documenting actual emissions for the previous calendar year.
   a. Form 1.0 "Facility Identification";
   b. Form 4.0 "Emissions unit-actual operations and emissions" for each emission unit;
   c. Form 5.0 "Title V annual emissions summary/fee"; and
   d. Part 3 "Application certification."
4. The fee shall be submitted annually by July 1. The fee shall be submitted with the following forms:
   a. Form 1.0 "Facility Identification";
   b. Form 5.0 "Title V annual emissions summary/fee";
   c. Part 3 "Application certification."
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".
G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:
1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other Applicable Requirements. 567 IAC 22.108 (15)"b"

G8. Duty to Provide Information
The permittee shall furnish to the director, within a reasonable time, any information that the director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the director copies of records required to be kept by the permit, or for information claimed to be confidential, the permittee shall furnish such records directly to the administrator of EPA along with a claim of confidentiality. 567 IAC 22.108 (9)"e"

G9. General Maintenance and Repair Duties
The owner or operator of any air emission source or control equipment shall:
1. Maintain and operate the equipment or control equipment at all times in a manner consistent with good practice for minimizing emissions.
2. Remedy any cause of excess emissions in an expeditious manner.
3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.
4. Schedule, at a minimum, routine maintenance of equipment or control equipment during periods of process shutdowns to the maximum extent possible. 567 IAC 24.2(1)

G10. Recordkeeping Requirements for Compliance Monitoring
1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
   a. The date, place and time of sampling or measurements
   b. The date the analyses were performed.
   c. The company or entity that performed the analyses.
   d. The analytical techniques or methods used.
   e. The results of such analyses; and
   f. The operating conditions as existing at the time of sampling or measurement.
   g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
   a. Comply with all terms and conditions of this permit specific to each alternative scenario.
   b. Maintain a log at the permitted facility of the scenario under which it is operating.
   c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

G11. Evidence used in establishing that a violation has or is occurring.
Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein.
1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
   a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22;
   b. Compliance test methods specified in 567 Chapter 25; or
   c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
   a. Any monitoring or testing methods provided in these rules; or
   b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2)

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

G13. Hazardous Release
The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report shall be made to the department at (515) 281-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements
1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the
incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. 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. Oral 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 oral report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1) ) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The oral report may be made 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 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 oral 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 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 must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.  
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.
e. The changes comply with all Applicable Requirements.
f. For such a change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:

i. A brief description of the change within the permitted facility,
ii. The date on which the change will occur,
iii. Any change in emission as a result of that change,
iv. The pollutants emitted subject to the emissions trade
v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
vii. Any permit term or condition no longer applicable as a result of the change.

567 IAC 22.110(1)

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

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

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

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

G18. Duty to Modify a Title V Permit

1. Administrative Amendment.

   a. An administrative permit amendment is a permit revision that is required to do 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 Permit Modification.
   a. Minor permit modification procedures may be used only for those permit modifications that do any of the following:
   i. Do not violate any Applicable Requirements
   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 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.
   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 a minor permit modification procedures and a request that such procedures be used; and
   iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).
   c. The permittee may make the change proposed in its minor permit modification application immediately after it files the application. After the permittee makes this change and until the director takes any of the actions specified in 567 IAC 22.112(4) "a" to "c", the permittee must comply with both the Applicable Requirements governing the change and the proposed permit terms and conditions. During this time, the permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the permittee fails to comply with its proposed permit terms and conditions during this time period, existing permit term terms and conditions it seeks to modify may subject the facility to enforcement action.

3. Significant 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, and those requirements that apply to Title V issuance and renewal. 567 IAC 22.111-567 IAC 22.113 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 22.105(1)"d"(4)

G19. Duty to Obtain Construction Permits
Unless exempted under 567 IAC 22.1(2), the permittee must not construct, install, reconstruct, or alter any equipment, control equipment or anaerobic lagoon without first obtaining a construction permit, conditional permit, or permit pursuant to 567 IAC 22.8, or permits required pursuant to 567 IAC 22.4 and 567 IAC 22.5. Such permits shall be obtained prior to the initiation of construction, installation or alteration of any portion of the stationary source. 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 conducting any renovation or demolition activities at the facility. 567 IAC 23.1(3)"a", and 567 IAC 23.2

G21. Open Burning
The permittee is prohibited from conducting open burning, except as may be allowed by 567 IAC 23.2. 567 IAC 23.2 except 23.2(3)"h"; 567 IAC 23.2(3)"h" - State Only

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

G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
   b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
   c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
   d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)

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

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

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

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

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

G24. Permit Reopenings

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

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

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

   b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to June 25, 1993.

   c. Reopening and revision on this ground is not required if the additional Applicable Requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
3. A permit shall be reopened and revised under any of the following circumstances:
   a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to June 25, 1993, 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)

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 to determine transferability of the permit. 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 an applicable requirement. For the department to consider test results a valid demonstration of compliance with applicable rules or a permit condition, such notice shall be given. 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. Unless specifically waived by the department's stack test contact, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. The department may accept a testing protocol in lieu of a pretest meeting. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance. Stack test notifications, reports and correspondence shall be sent to:
- Stack Test Review Coordinator
- Iowa DNR, Air Quality Bureau
- 7900 Hickman Road, Suite #1
- Urbandale, IA 50322
- (515) 242-6001

Within Polk and Linn Counties, stack test notifications, reports and correspondence shall also be directed to the supervisor of the respective county air pollution program. 567 IAC 25.1(7)"a", 567 IAC 25.1(9)
G31. Prevention of Air Pollution Emergency Episodes
The permittee shall comply with the provisions of 567 IAC Chapter 26 in the prevention of excessive build-up of air contaminants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these contaminants on the health of persons. 567 IAC 26.1(1)

G32. Contacts List
The current address and phone number for reports and notifications to the EPA administrator is:
   Chief of Air Permits
   EPA Region 7
   Air Permits and Compliance Branch
   901 N. 5th Street
   Kansas City, KS 66101
   (913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:
   Chief, Air Quality Bureau
   Iowa Department of Natural Resources
   7900 Hickman Road, Suite #1
   Urbandale, IA 50322
   (515) 242-5100

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

   **Field Office 1**
   909 West Main – Suite 4
   Manchester, IA 52057
   (563) 927-2640

   **Field Office 2**
   P.O. Box 1443
   2300-15th St., SW
   Mason City, IA 50401
   (641) 424-4073

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

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

   **Field Office 5**
   401 SW 7th Street, Suite I
   Des Moines, IA 50309
   (515) 725-0268

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

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

   **Linn County Public Health Dept.**
   Air Pollution Control Division
   501 13th St., NW
   Cedar Rapids, IA 52405
   (319) 892-6000
Appendix A: DNR Air Quality Policy 3-b-08, Opacity Limits
POLICY/PROCEDURE STATEMENT

TOPIC: Opacity Limits

Policy Procedure Number: 3-b-08  Replaces Number: None

Date:  Effective Date: November 12, 1998

Preparer: David Phelps  Reviewer:

Approval:  Bureau Chief: Peter Hamlin  Date: 11/12/98
Division Administrator: Allan Stokes  Date: 11/12/98

Applicable Code of Iowa or Iowa Administrative Code Rule: 23.3(2)d

“No person shall allow, cause or permit the emission of visible air contaminants into the atmosphere from any equipment, internal combustion engine, premise fire, open tire or stack, equal to or in excess of 40 percent opacity or that level specified in a construction permit, except as provided below and in 567-Chapter 24.”

REASON OR BACKGROUND

The default opacity limit allowed by regulation is 40%. This limit was established with the original regulations in 1970. It is generally accepted that opacity greater than 40% was evidence of a mass emission standard exceedence. More recently, there have been requests from facilities for limits much lower than that allowed by the regulations, in some cases less than 0.01 gr/scf to which a 40% opacity limit does not correspond. Since opacity is used as an indicator of the particulate emission rate, listing an indicated potential problem opacity that is more in line with the mass emission rate is useful. In order to have the authority to set limits lower than 40%, subrule 23.3(2)d was changed. This change allows the department the ability to set opacity limits at a level that more closely corresponds to what would be observed by the source when operating in compliance with its mass emission rate.

Except in the case where a specific opacity limit is established by rule, it has been the general policy of the Department not to take action on opacity limits directly. Rather, if it is felt that a violation of the mass emission rate exists that is not attributable to some abnormal event, a stack test would be required to verify compliance. However, the Department reserves the right to use the results of formal opacity readings as evidence of an exceedence.
DETAILS

It shall be the policy of the Department to list the default opacity as a permit condition and in addition an indicator opacity may be listed.

For ease of proving continual compliance a source may request a ‘no visible emissions’ opacity limit which allows proof of compliance without having a certified opacity reading taken. In this case any visible emissions would be an exceedance.

The IDNR permit writer may list an opacity that will be a indicator of possible mass emission rate exceedence. If the permittee wishes, the recommended indicator opacity may be changed by demonstrating compliance with the mass emission rate during a stack test while emitting the new desired indicator opacity. If the tested mass emission rate is less than the permitted emission rate, then the desired indicator opacity may be set at a proportionally higher level than observed during the stack test.

If an opacity measurement, taken in accordance with an approved reference method for opacity, (generally USEPA Method 9 or 22) exceeds the indicator opacity then the facility will promptly investigate the source and make corrections. However, if after corrections are made the opacity continues to exceed the indicator opacity the Department may require additional proof to demonstrate compliance with the mass emissions limits.

**Recommended indicator opacities shall be:**

<table>
<thead>
<tr>
<th>Grain Loading gr./scf</th>
<th>Recommended Indicator Opacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;0.01 gr./scf</td>
<td>non specified in permit *</td>
</tr>
<tr>
<td>0.01 to 0.06 gr./scf</td>
<td>10% Opacity</td>
</tr>
<tr>
<td>0.061 to 0.08 gr./scf</td>
<td>20% Opacity</td>
</tr>
<tr>
<td>0.081 to 0.1 gr./scf</td>
<td>25% Opacity</td>
</tr>
</tbody>
</table>

* A line is added to the permit that states: “If visible emissions are observed other that start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.”

If a source is a batch process the indicator opacity shall be based on the table above, but the opacity averaging period, for comparison to the indicator opacity, shall be the entire batch cycle. For purposes of comparison to the indicator opacity readings shall be taken during the entire cycle and averaged.

Sources are also given the opportunity to set source specific limits to be coordinated with the initial compliance test. These may then be incorporated into the permit.

In all cases an exceedence of the indicator opacity will require the permittee to file an “indicator opacity exceedence report” to the IDNR regional office. The reporting requirements shall be:
**Oral report of excess indicator opacity.** An incident of excess indicator opacity (other than an incident of excess indicator opacity during a period of startup, shutdown, or cleaning) shall be reported to the appropriate regional 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 indicator opacity during startup and 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 subrule 25.1(6).

An oral report of excess indicator opacity is not required for a source with operational continuous monitoring equipment (as specified in subrule 25.1(1)) if the incident of excess indicator opacity continues for less than 30 minutes and does not exceed the applicable visible emission standard by more than 10 percent opacity.

The oral report may be made in person or by telephone and shall include as a minimum the following:

a) The identity of the equipment or source operation form which the excess indicator opacity originated and the associated stack or emission point.

b) The estimated quantity of the excess indicator opacity.

c) The time and expected duration of the excess indicator opacity.

d) The cause of the excess indicator opacity.

e) The steps being taken to remedy the excess indicator opacity.

f) The steps being taken to limit the excess indicator opacity in the interim period.

**Written report of excess indicator opacity.** A written report of an incident of excess indicator opacity shall be submitted as a follow-up to all required oral reports to the department within seven (7) days of the onset of the upset condition, and shall include as a minimum the following:

a) The identity of the equipment or source operation point from which the excess emission originate and the associated stack or emission point.

b) The estimated quantity of the excess indicator opacity.

c) The time and duration of the excess indicator opacity.

d) The cause of the excess indicator opacity.

e) The steps that were taken to remedy and to prevent the recurrence of the incident of excess indicator opacity.

f) The steps that were taken to limit the excess indicator opacity.

g) If the owner claims that the excess indicator opacity was due to malfunction, documentation to support this claim.

**Exceptions to this policy:**

1) In the case where a facility has an opacity limit established in an existing permit, no change will be made to that permit limit unless the permit is being modified for other purposes.

2) If the facility has a continuous opacity monitor, this policy shall not apply.

3) This policy shall not apply to opacity limits established in Prevention of Significant Deterioration (PSD) permits or permits that were established for maintenance plans for nonattainment areas.

4) This policy shall not apply where an opacity limit is established as an indication of hazardous air pollutants.
5) This policy shall not apply where an opacity limit is established by a rule, New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPS), etc.
Appendix B: 40 CFR 60 Subpart VV
Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic
Chemicals Manufacturing Industry

§ 60.480 Applicability and designation of affected facility.

(a) (1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

(2) The group of all equipment (defined in § 60.481) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d) (1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in § 60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from § 60.482.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from § 60.482.

(4) Any affected facility that produces beverage alcohol is exempt from § 60.482.

(5) Any affected facility that has no equipment in VOC service is exempt from § 60.482.

(e) Alternative means of compliance -- (1) Option to comply with part 65. Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§ 60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of § 60.485(d), (e), and (f), and § 60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.

(2) Part 60, subpart A. Owners or operators who choose to comply with 40 CFR part 65, subpart F must also comply with §§ 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 65, subpart F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart F, must comply with 40 CFR part 65, subpart A.

§ 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$,

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation: $A = Y \times (B \div 100)$;
(2) The percent \( Y \) is determined from the following equation: 
\[
Y = 1.0 - 0.575 \log X,
\]
where \( X \) is 1982 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, \( B \), is selected from the following table consistent with the applicable subpart:

**Table for Determining Applicable for \( B \)**

<table>
<thead>
<tr>
<th>Value of applicable to facility</th>
<th>Value of to be used in equation</th>
<th>Subpart</th>
</tr>
</thead>
<tbody>
<tr>
<td>VV</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>DDD</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>GGG</td>
<td>7.0</td>
<td>7.0</td>
</tr>
<tr>
<td>KKK</td>
<td>4.5</td>
<td>4.5</td>
</tr>
</tbody>
</table>

**Closed vent system** means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

**Connector** means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.

**Control device** means an enclosed combustion device, vapor recovery system, or flare.

**Distance piece** means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

**Double block and bleed system** means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

**Duct work** means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

**Equipment** means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

**First attempt at repair** means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.

**Fuel gas** means gases that are combusted to derive useful work or heat.

**Fuel gas system** means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

**Hard-piping** means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007-2900).

**In gas/vapor service** means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

**In heavy liquid service** means that the piece of equipment is not in gas/vapor service or in light liquid service.

**In light liquid service** means that the piece of equipment contains a liquid that meets the conditions specified in § 60.485(e).

**In-situ sampling systems** means nonextractive samplers or in-line samplers.
In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of § 60.485(d) specify how to determine that a piece of equipment is not in VOC service.)

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in § 60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in § 60.489.

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in § 60.2 Definitions.

§ 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§ 60.482-1 through 60.482-10 or § 60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§ 60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in § 60.485.
(c) (1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§ 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, and 60.482-10 as provided in § 60.484.

(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§ 60.482-2, 60.482-3, 60.482-5, 60.482-6, 60.482-7, 60.482-8, or 60.482-10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§ 60.482-2 to 60.482-10 if it is identified as required in § 60.486(e)(5).

§ 60.482-2 Standards: Pumps in light liquid service.

(a) (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in § 60.482-1(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), Provided the following requirements are met:

(1) Each dual mechanical seal system is --

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6) (i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9.

(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(e) Any pump that is designated, as described in § 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

1. Has no externally actuated shaft penetrating the pump housing,
2. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 60.485(c), and
3. Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of § 60.482-10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in § 60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

1. The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
2. The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

§ 60.482-3 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in § 60.482-1(c) and paragraph (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) shall be:

1. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
2. Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10; or
3. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.
(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.

(g) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of § 60.482-10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in § 60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)-(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in § 60.485(c); and

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of § 60.14 or § 60.15 is exempt from § 60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in § 60.485(c).

(b) (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in § 60.482-9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in § 60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in § 60.482-10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.
(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in § 60.482-9.

§ 60.482-5 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in § 60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:

1. Return the purged process fluid directly to the process line; or
2. Collect and recycle the purged process fluid to a process; or
3. Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of § 60.482-10; or
4. Collect, store, and transport the purged process fluid to any of the following systems or facilities:
   (i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;
   (ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
   (iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

§ 60.482-6 Standards: Open-ended valves or lines.

(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.482-1(c).
   (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.
§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in § 60.485(b) and shall comply with paragraphs (b) through (c), except as provided in paragraphs (f), (g), and (h), § 60.483-1, 2, and § 60.482-1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:
   (1) Tightening of bonnet bolts;
   (2) Replacement of bonnet bolts;
   (3) Tightening of packing gland nuts;
   (4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in § 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
   (1) Has no external actuating mechanism in contact with the process fluid,
   (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 60.485(c), and
   (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in § 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
   (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
   (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in § 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
   (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
   (2) The process unit within which the valve is located either becomes an affected facility through § 60.14 or § 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
   (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.
§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:
   (1) The owner or operator shall monitor the equipment within 5 days by the method specified in § 60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.
   (2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482-9.
   (2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under § 60.482-7(e).

§ 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:
   (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
   (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 60.482-10.

(d) Delay of repair for pumps will be allowed if:
   (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
   (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
§ 60.482-10 Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.

(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

   (1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:
      (i) Conduct an initial inspection according to the procedures in § 60.485(b); and
      (ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
   (2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
      (i) Conduct an initial inspection according to the procedures in § 60.485(b); and
      (ii) Conduct annual inspections according to the procedures in § 60.485(b).

(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

   (1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
   (2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:
(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through §§ 60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in § 60.486(c).

(4) For each inspection conducted in accordance with § 60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

§ 60.483-1 Alternative standards for valves -- allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in § 60.487(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with § 60.482-7(d) and (e).

(c) Performance tests shall be conducted in the following manner:
(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in § 60.485(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

§ 60.483-2 Alternative standards for valves -- skip period leak detection and repair.

(a) (1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in § 60.487(d).

(b) (1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in § 60.482-7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in § 60.482-7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

§ 60.484 Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:
(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).

(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

(e) (1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.

(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

(f) (1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

§ 60.485 Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the standards in §§ 60.482, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

   (i) Zero air (less than 10 ppm of hydrocarbon in air); and
   (ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.
(c) The owner or operator shall determine compliance with the no detectable emission standards in §§ 60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

1. The requirements of paragraph (b) shall apply.
2. Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

1. Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference -- see § 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
2. Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
3. Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

1. The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference -- see § 60.17) shall be used to determine the vapor pressures.
2. The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.
3. The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:

1. Method 22 shall be used to determine visible emissions.
2. A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.
3. The maximum permitted velocity for air assisted flares shall be computed using the following equation:

\[
V_{max} = K_1 + K_2 HT
\]

Where:

- \( V_{max} \) = Maximum permitted velocity, m/sec (ft/sec)
- \( HT \) = Net heating value of the gas being combusted, MJ/scm (Btu/scf).
- \( K_1 = 8.706 \) m/sec (metric units)
  = 28.56 ft/sec (English units)
- \( K_2 = 0.7084 \) m 4/(MJ-sec) (metric units)
  = 0.087 ft 4/(Btu-sec) (English units)
4. The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:
\[ H_T = K \sum_{i=1}^{n} C_i H_i \]

Where:
\[ K = \text{Conversion constant, } 1.740 \times 10^7 \text{ (g-mole)(MJ)/(ppm-scm-kcal) (metric units)} \]
\[ = 4.674 \times 10^8 \text{ [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)} \]
\[ C_i = \text{Concentration of sample component } "i", \text{ ppm} \]
\[ H_i = \text{net heat of combustion of sample component } "i" \text{ at } 25 ^\circ \text{C and 760 mm Hg (77 } ^\circ \text{F and 14.7 psi), kcal/g-mole} \]

(5) Method 18 and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference -- see § 60.17) shall be used to determine the concentration of sample component "i."

(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference -- see § 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.

(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

**§ 60.486 Recordkeeping requirements.**

(a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in §§ 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in § 60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§ 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in § 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepai red.

(9) The date of successful repair of the leak.
(d) The following information pertaining to the design requirements for closed vent systems and control devices described in § 60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
(2) The dates and descriptions of any changes in the design specifications.
(3) A description of the parameter or parameters monitored, as required in § 60.482-10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
(4) Periods when the closed vent systems and control devices required in §§ 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.
(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§ 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in §§ 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.
(2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§ 60.482-2(e), 60.482-3(i) and 60.482-7(f).
   (ii) The designation of equipment as subject to the requirements of § 60.482-2(e), § 60.482-3(i), or § 60.482-7(f) shall be signed by the owner or operator.
(3) A list of equipment identification numbers for pressure relief devices required to comply with § 60.482-4.
(4) (i) The dates of each compliance test as required in §§ 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).
   (ii) The background level measured during each compliance test.
   (iii) The maximum instrument reading measured at the equipment during each compliance test.
(5) A list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of § 60.482-7(g) and (h) and to all pumps subject to the requirements of § 60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with § 60.483-2:

(1) A schedule of monitoring.
(2) The percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in §§ 60.482-2(d)(5) and 60.482-3(c)(2) and explanation of the design criterion; and
(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in § 60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,
(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
(3) An analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of §  60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

§ 60.487 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:
   (1) Process unit identification.
   (2) Number of valves subject to the requirements of §  60.482-7, excluding those valves designated for no detectable emissions under the provisions of §  60.482-7(f).
   (3) Number of pumps subject to the requirements of §  60.482-2, excluding those pumps designated for no detectable emissions under the provisions of §  60.482-2(e) and those pumps complying with §  60.482-2(f).
   (4) Number of compressors subject to the requirements of §  60.482-3, excluding those compressors designated for no detectable emissions under the provisions of §  60.482-3(i) and those compressors complying with §  60.482-3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §  60.486:
   (1) Process unit identification.
   (2) For each month during the semiannual reporting period,
      (i) Number of valves for which leaks were detected as described in §  60.482(7)(b) or §  60.483-2,
      (ii) Number of valves for which leaks were not repaired as required in §  60.482-7(d)(1),
      (iii) Number of pumps for which leaks were detected as described in §  60.482-2(b) and (d)(6)(i),
      (iv) Number of pumps for which leaks were not repaired as required in §  60.482-2(c)(1) and (d)(6)(ii),
      (v) Number of compressors for which leaks were detected as described in §  60.482-3(f),
      (vi) Number of compressors for which leaks were not repaired as required in §  60.482-3(g)(1), and
      (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
   (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
   (4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of §§  60.483-1 or 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with §  60.8 of the General Provisions. The provisions of §  60.8(d) do not apply to affected facilities subject to the
provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

§ 60.488 Reconstruction.

For the purposes of this subpart:
(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable new facility" under § 60.15: pump seals, nuts and bolts, rupture disks, and packings.

(b) Under § 60.15, the "fixed capital cost of new components" includes the fixed capital cost of all depreciable components (except components specified in § 60.488(a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.
## Appendix C: 40 CFR 63 Subpart GGGG-Tables

### Table 1 of §63.2833 -- Categorizing Your Source as Existing or New

<table>
<thead>
<tr>
<th>If your affected source...</th>
<th>And if...</th>
<th>Then your affected source...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) was constructed or began construction before May 26, 2000</td>
<td>reconstruction has not occurred</td>
<td>is an existing source.</td>
</tr>
<tr>
<td>(2) began reconstruction, as defined in §63.2, on or after May 26, 2000</td>
<td>(i) reconstruction was part of a scheduled plan to comply with the existing source requirements of this subpart; and (ii) reconstruction was completed no later than 3 years after the effective date of this subpart</td>
<td>remains an existing source.</td>
</tr>
<tr>
<td>(3) began a significant modification, as defined in §63.2872, at any time on an existing source</td>
<td>the modification does not constitute reconstruction</td>
<td>remains an existing source.</td>
</tr>
<tr>
<td>(4) began a significant modification, as defined in §63.2872, at any time on a new source</td>
<td>the modification does not constitute reconstruction</td>
<td>remains a new source.</td>
</tr>
<tr>
<td>(5) began reconstruction on or after May 26, 2000</td>
<td>reconstruction was completed later than 3 years after the effective date of this subpart</td>
<td>is a new source.</td>
</tr>
<tr>
<td>(6) began construction on or after May 26, 2000</td>
<td></td>
<td>is a new source.</td>
</tr>
</tbody>
</table>

### Table 1 of §63.2834 -- Compliance Dates for Existing and New Sources

<table>
<thead>
<tr>
<th>If your affected source is categorized as...</th>
<th>And if...</th>
<th>Then your compliance date is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) an existing source</td>
<td>you startup your affected source before the effective date of this subpart</td>
<td>3 years after the effective date of this subpart.</td>
</tr>
<tr>
<td>(b) a new source</td>
<td>you startup your affected source on or after the effective date of this subpart</td>
<td>the effective date of this subpart.</td>
</tr>
<tr>
<td>(c) a new source</td>
<td></td>
<td>your startup date.</td>
</tr>
</tbody>
</table>
Table 1 of §63.2840 -- Oilseed Solvent Loss Factors for Determining Allowable HAP Loss

<table>
<thead>
<tr>
<th>Type of Oilseed Process</th>
<th>A source that...</th>
<th>Oilseed Solvent Loss Factor (gal/ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Existing Sources</td>
</tr>
<tr>
<td>(i) Corn Germ, Wet Milling</td>
<td>processes corn germ that has been separated from other corn components using a “wet” process of centrifuging a slurry steeped in a dilute sulfurous acid solution.</td>
<td>0.4</td>
</tr>
<tr>
<td>(ii) Corn Germ, Dry Milling</td>
<td>processes corn germ that has been separated from the other corn components using a “dry” process of mechanical chafing and air sifting.</td>
<td>0.7</td>
</tr>
<tr>
<td>(iii) Cottonseed, Large</td>
<td>processes 120,000 tons or more of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.</td>
<td>0.5</td>
</tr>
<tr>
<td>(iv) Cottonseed, Small</td>
<td>processes less than 120,000 tons of a combination of cottonseed and other listed oilseeds during all normal operating periods in a 12 operating month period.</td>
<td>0.7</td>
</tr>
<tr>
<td>(v) Flax</td>
<td>processes flax.</td>
<td>0.6</td>
</tr>
<tr>
<td>(vi) Peanuts</td>
<td>processes peanuts.</td>
<td>1.2</td>
</tr>
<tr>
<td>(vii) Rapeseed</td>
<td>processes rapeseed.</td>
<td>0.7</td>
</tr>
<tr>
<td>(viii) Safflower</td>
<td>processes safflower.</td>
<td>0.7</td>
</tr>
<tr>
<td>(ix) Soybean, Conventional</td>
<td>uses a conventional style desolventizer to produce crude soybean oil products and soybean animal feed products.</td>
<td>0.2</td>
</tr>
<tr>
<td>(x) Soybean, Specialty</td>
<td>uses a special style desolventizer to produce soybean meal products for human and animal consumption.</td>
<td>1.7</td>
</tr>
<tr>
<td>(xi) Soybean, Combination Plant with Low Specialty Production</td>
<td>processes soybeans in both specialty and conventional desolventizers and the quantity of soybeans processed in specialty desolventizers during normal operating periods is less than 3.3 percent of total soybeans processed during all normal operating periods in a 12 operating month period. The corresponding solvent loss factor is an overall value and applies to the total quantity of soybeans processed.</td>
<td>0.25</td>
</tr>
<tr>
<td>(xii) Sunflower</td>
<td>processes sunflower.</td>
<td>0.4</td>
</tr>
</tbody>
</table>
### Table 1 of §63.2850 — Requirements for Compliance with HAP Emission Standards

<table>
<thead>
<tr>
<th>Are you required to...</th>
<th>For periods of normal operation?</th>
<th>For initial startup periods subject to §63.2850(c)(2) or (d)(2)?</th>
<th>For malfunction periods subject to §63.2850(c)(2)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Operate and maintain your source in accordance with your SSM plan as described in §63.2852?</td>
<td>No, your source is not subject to the SSM plan, but rather the HAP emission limits of this standard.</td>
<td>Yes, throughout the entire initial startup period.</td>
<td>Yes, throughout the entire malfunction period.</td>
</tr>
<tr>
<td>(b) Determine and record the extraction solvent loss in gallons from your source?</td>
<td>Yes, as described in §63.2853.</td>
<td>Yes, as described in §63.2862(e).</td>
<td>Yes, as described in §63.2862(e).</td>
</tr>
<tr>
<td>(c) Record the volume fraction of HAP present at greater than 1 percent by volume and gallons of extraction solvent in shipment received?</td>
<td>Yes.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>(d) Determine and record the tons of each oilseed type processed by your source?</td>
<td>Yes, as described in §63.2855.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>(e) Determine the weighted average volume fraction of HAP in extraction solvent received as described in §63.2854 by the end of the following calendar month?</td>
<td>Yes.</td>
<td>No. Except for solvent received by a new or reconstructed source commencing operation under an initial startup period, the HAP volume fraction in any solvent received during an initial startup period is included in the weighted average HAP determination for the next operating month.</td>
<td>No, the HAP volume fraction in any solvent received during a malfunction period is included in the weighted average HAP determination for the next operating month.</td>
</tr>
<tr>
<td>(f) Determine and record the actual solvent loss, weighted average volume fraction HAP, oilseed processed and compliance ratio for each 12 operating month period as described in §63.2840 by the end of the following calendar month?</td>
<td>Yes.</td>
<td>No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period.</td>
<td>No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.</td>
</tr>
<tr>
<td>(g) Submit a Notification of Compliance Status or Annual Compliance Certification as appropriate?</td>
<td>Yes, as described in §§63.2860(d) and 63.2861(a).</td>
<td>No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the initial startup period.</td>
<td>No. However, you may be required to submit an annual compliance certification for previous operating months, if the deadline for the annual compliance certification happens to occur during the malfunction period.</td>
</tr>
</tbody>
</table>
(h) Submit a Deviation Notification Report by the end of the calendar month following the month in which you determined that the compliance ratio exceeds 1.00 as described in §63.2861(b)?

Yes. No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for an initial startup period.

No, these requirements are not applicable because your source is not required to determine the compliance ratio with data recorded for a malfunction period.

(i) Submit a Periodic SSM Report as described in §63.2861(c)?

No, a SSM activity is not categorized as normal operation.

Yes. Yes.

(j) Submit an Immediate SSM Report as described in §63.2861(d)?

No, a SSM activity is not categorized as normal operation.

Yes, only if your source does not follow the SSM plan.

Yes, only if your source does not follow the SSM plan.

Table 2 of §63.2850 -- Schedules for Demonstrating Compliance Under Various Source Operating Modes

<table>
<thead>
<tr>
<th>If your source is...</th>
<th>and is operating under...</th>
<th>then your recordkeeping schedule...</th>
<th>You must determine your first compliance ratio by the end of the calendar month following...</th>
<th>Base your first compliance ratio on information recorded...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Existing Normal operation,</td>
<td>Begins on the compliance date.</td>
<td>The first 12 operating months after the compliance date.</td>
<td>During the first 12 operating months after the compliance date.</td>
<td></td>
</tr>
<tr>
<td>(b) New Normal operation,</td>
<td>Begins on the startup date of your new source.</td>
<td>The first 12 operating months after the startup date of the new source.</td>
<td>During the first 12 operating months after the startup date of the new source.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(2) An initial startup period,</td>
<td>Begins on the startup date of your new source.</td>
<td>The first 12 operating months after termination of the initial startup period, which can last for up to 6 months.</td>
<td>During the first 12 operating months after the initial startup period, which can last for up to 6 months.</td>
</tr>
<tr>
<td>(c) Existing or new that has been significantly modified</td>
<td>(1) Normal operation,</td>
<td>Resumes on the startup date of the modified source.</td>
<td>The first operating month after the startup date of the modified source.</td>
<td>During the previous 11 operating months prior to the significant modification and the first operating month following the initial startup date of the source.</td>
</tr>
<tr>
<td></td>
<td>(2) An initial startup period,</td>
<td>Resumes on the startup date of the modified source.</td>
<td>The first operating month after termination of the initial startup period, which can last up to 3 months.</td>
<td>During the 11 operating months before the significant modification and the first operating month after the initial startup period.</td>
</tr>
</tbody>
</table>
Table 1 of §63.2853 -- Categorizing Your Source Operating Status

<table>
<thead>
<tr>
<th>If during a recorded time interval...</th>
<th>then your source operating status is...</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) your source processes any amount of listed oilseed and your source is not operating under an initial startup period or a malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)</td>
<td>a normal operating period.</td>
</tr>
<tr>
<td>(ii) your source processes no agricultural product and your source is not operating under an initial startup period or malfunction period subject to §63.2850(c)(2), (d)(2), or (e)(2)</td>
<td>a nonoperating period.</td>
</tr>
<tr>
<td>(iii) you choose to operate your source under an initial startup period subject to §63.2850(c)(2) or (d)(2)</td>
<td>an initial startup period.</td>
</tr>
<tr>
<td>(iv) you choose to operate your source under a malfunction period subject to §63.2850(e)(2)</td>
<td>a malfunction period.</td>
</tr>
<tr>
<td>(v) your source processes agricultural products not defined as listed oilseed</td>
<td>an exempt period.</td>
</tr>
</tbody>
</table>

Table 1 of §63.2870 -- Applicability of 40 CFR Part 63, Subpart A, to 40 CFR, Part 63, Subpart GGGG

<table>
<thead>
<tr>
<th>General Provisions Citation</th>
<th>Subject of Citation</th>
<th>Brief Description of Requirement</th>
<th>Applies to Subpart</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial applicability determination; applicability after standard established; permit requirements; extensions; notifications</td>
<td>Yes</td>
<td>Except as specifically provided in this subpart.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and abbreviations</td>
<td>Units and abbreviations for part 63 standards</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited activities and circumvention</td>
<td>Prohibited activities; compliance date; circumvention; severability</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/reconstruction</td>
<td>Applicability; applications; approvals</td>
<td>Yes</td>
<td>Except for subsections of §63.5 as listed below.</td>
</tr>
<tr>
<td>§63.5(c)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.5(d)(1)(ii)(H)</td>
<td>Application for approval</td>
<td>Type and quantity of HAP, operating parameters</td>
<td>No</td>
<td>All sources emit HAP. Subpart GGGG does not require control from specific emission points.</td>
</tr>
<tr>
<td>§63.5(d)(1)(ii)(I)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.5(d)(1)(iii), (d)(2), (d)(3)(ii)</td>
<td>Application for approval</td>
<td>No</td>
<td>The requirements of the application for approval for new, reconstructed and significantly modified sources are described in §63.2860(b) and (c).</td>
<td></td>
</tr>
</tbody>
</table>
General provision requirements for identification of HAP emission points or estimates of actual emissions are not required. Descriptions of control and methods, and the estimated and actual control efficiency of such do not apply. Requirements for describing control equipment and the estimated and actual control efficiency of such equipment apply only to control equipment to which the subpart GGGG requirements for quantifying solvent destroyed by an add-on control device would be applicable.

<table>
<thead>
<tr>
<th>§63.6</th>
<th>Applicability of General Provisions</th>
<th>Applicability</th>
<th>Yes</th>
<th>Except for subsections of §63.6 as listed below.</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.6(b)(1)-(3)</td>
<td>Compliance dates, new and reconstructed sources</td>
<td>No</td>
<td>Section 63.2834 of subpart GGGG specifies the compliance dates for new and reconstructed sources.</td>
<td></td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(c)(3)-(4)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.6(e)</td>
<td>Operation and maintenance requirements</td>
<td>Yes</td>
<td>Implement your SSM plan, as specified in §63.2851.</td>
<td></td>
</tr>
<tr>
<td>§63.6(f)-(g)</td>
<td>Compliance with nonopacity emission standards except during SSM</td>
<td>Comply with emission standards at all times except during SSM</td>
<td>No</td>
<td>Subpart GGGG does not have nonopacity requirements.</td>
</tr>
<tr>
<td>§63.6(h)</td>
<td>Opacity/Visible emission (VE) standards</td>
<td>No</td>
<td>Subpart GGGG has no opacity or VE standards.</td>
<td></td>
</tr>
<tr>
<td>§63.6(i)</td>
<td>Compliance extension</td>
<td>Procedures and criteria for responsible agency to grant compliance extension</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.6(j)</td>
<td>Presidential compliance exemption</td>
<td>President may exempt source category from requirement to comply with</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§ &lt;63.7</td>
<td>Performance testing requirements</td>
<td>Schedule, conditions, notifications and procedures</td>
<td>Yes</td>
<td>Subpart GGGG requires performance testing only if the source applies additional control that destroys solvent. Section 63.2850(a)(6) requires sources to follow the performance testing guidelines of the General Provisions if a control is added.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>§ &lt;63.8</td>
<td>Monitoring requirements</td>
<td>No</td>
<td>Subpart GGGG does not require monitoring other than as specified therein.</td>
<td></td>
</tr>
<tr>
<td>§ &lt;63.9</td>
<td>Notification requirements</td>
<td>Applicability and state delegation</td>
<td>Yes</td>
<td>Except for subsections of §63.9 as listed below.</td>
</tr>
<tr>
<td>§63.9(b)(2)</td>
<td>Notification requirements</td>
<td>Initial notification requirements for existing sources</td>
<td>No</td>
<td>Section 63.2860(a) of subpart GGGG specifies the requirements of the initial notification for existing sources.</td>
</tr>
<tr>
<td>§63.9(b)(3)-(5)</td>
<td>Notification requirements</td>
<td>Notification requirement for certain new/reconstructed sources</td>
<td>Yes</td>
<td>Except the information requirements differ as described in §63.2860(b) of subpart GGGG.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of performance test</td>
<td>Notify responsible agency 60 days ahead</td>
<td>Yes</td>
<td>Applies only if performance testing is performed.</td>
</tr>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/opacity observations</td>
<td>Notify responsible agency 30 days ahead</td>
<td>No</td>
<td>Subpart GGGG has no opacity or VE standards.</td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional notifications when using a continuous monitoring system (CMS)</td>
<td>Notification of performance evaluation; Notification using COMS data; notification that exceeded criterion for relative accuracy</td>
<td>No</td>
<td>Subpart GGGG has no CMS requirements.</td>
</tr>
<tr>
<td>§63.9(h)</td>
<td>Notification of compliance status</td>
<td>Contents</td>
<td>No</td>
<td>Section 63.2860(d) of subpart GGGG specifies requirements</td>
</tr>
<tr>
<td>Section</td>
<td>Topic</td>
<td>Description</td>
<td>Reporting</td>
<td>Notes</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
<td>-------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>§63.10</td>
<td>Recordkeeping/reporting</td>
<td>Schedule for reporting, record storage</td>
<td>Yes</td>
<td>Except for subsections of §63.10 as listed below.</td>
</tr>
<tr>
<td>§63.10(b)(2)(i)</td>
<td>Recordkeeping</td>
<td>Record SSM event</td>
<td>Yes</td>
<td>Applicable to periods when sources must implement their SSM plan as specified in subpart GGGG.</td>
</tr>
<tr>
<td>§63.10(b)(2)(ii)-(iii)</td>
<td>Recordkeeping</td>
<td>Malfunction of air pollution equipment</td>
<td>No</td>
<td>Applies only if air pollution control equipment has been added to the process and is necessary for the source to meet the emission limit.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vi)</td>
<td>Recordkeeping</td>
<td>CMS recordkeeping</td>
<td>No</td>
<td>Subpart GGGG has no CMS requirements.</td>
</tr>
<tr>
<td>§63.10(b)(2)(viii)-(ix)</td>
<td>Recordkeeping</td>
<td>Conditions of performance test</td>
<td>Yes</td>
<td>Applies only if performance tests are performed. Subpart GGGG does not have any CMS opacity or VE observation requirements.</td>
</tr>
<tr>
<td>§63.10(b)(2)(x)-(xii)</td>
<td>Recordkeeping</td>
<td>CMS, performance testing, and opacity and VE observations recordkeeping</td>
<td>No</td>
<td>Subpart GGGG does not require CMS.</td>
</tr>
<tr>
<td>§63.10(c)</td>
<td>Recordkeeping</td>
<td>Additional CMS recordkeeping</td>
<td>No</td>
<td>Subpart GGGG does not require CMS.</td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Reporting</td>
<td>Reporting performance test results</td>
<td>Yes</td>
<td>Applies only if performance testing is performed.</td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting</td>
<td>Reporting opacity or VE observations</td>
<td>No</td>
<td>Subpart GGGG has no opacity or VE standards.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Reporting</td>
<td>Progress reports</td>
<td>Yes</td>
<td>Applies only if a condition of compliance extension exists.</td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>Reporting</td>
<td>SSM reporting</td>
<td>No</td>
<td>Section 63.2861(c) and (d) specify SSM reporting requirements.</td>
</tr>
<tr>
<td>§63.10(e)</td>
<td>Reporting</td>
<td>Additional CMS reports</td>
<td>No</td>
<td>Subpart GGGG does not require CMS.</td>
</tr>
<tr>
<td>§63.11</td>
<td>Control device requirements</td>
<td>Requirements for flares</td>
<td>Yes</td>
<td>Applies only if your source uses a flare to control solvent emissions. Subpart GGGG does not require flares.</td>
</tr>
<tr>
<td>§63.12</td>
<td>State authority and delegations</td>
<td>State authority to enforce standards</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.13</td>
<td>State/regional addresses</td>
<td>Addresses where reports, notifications, and requests are sent</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.14</td>
<td>Incorporation by reference</td>
<td>Test methods incorporated by reference</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>§63.15</td>
<td>Availability of information and confidentiality</td>
<td>Public and confidential information</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>
Appendix D: 40 CFR 63 Subpart DDDDD
(48) ASTM D5865–02a, Standard Test Method for Gross Calorific Value of Coal and Coke, 1 IBR approved for Table 6 to Subpart DDDDD of this part.

(49) ASTM D6323–98 (Reapproved 2003), Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities, 1 IBR approved for Table 6 to Subpart DDDDD of this part.

(50) ASTM E711–87 (Reapproved 1996), Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, 1 IBR approved for Table 6 to Subpart DDDDD of this part.  

(51) ASTM E776–87 (Reapproved 1996), Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel, 1 IBR approved for Table 6 to Subpart DDDDD of this part.  

(52) ASTM E871–82 (Reapproved 1998), Standard Method of Moisture Analysis of Particulate Wood Fuels, 1 IBR approved for Table 6 to Subpart DDDDD of this part.  

(53) ASTM E885–88 (Reapproved 1996), Standard Test Methods for Analyses of Metals in Refuse-Derived Fuel by Atomic Absorption Spectroscopy, 1 IBR approved for Table 6 to Subpart DDDDD of this part.

63.7490  What are the purpose of this subpart?

63.7485  Am I subject to this subpart?

63.7490  What is the affected source of this subpart?

63.7491  Are any boilers or process heaters not subject to this subpart?

63.7495  When do I have to comply with this subpart?

63.7499  What are the subcategories of boilers and process heaters?

63.7500  What emission limits, work practice standards, and operating limits must I meet?

63.7505  What are my general requirements for complying with this subpart?

63.7506  Do any boilers or process heaters have limited requirements?

63.7507  What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

63.7510  What are my initial compliance requirements and by what date must I conduct them?

63.7515  When must I conduct subsequent performance tests or fuel analyses?

63.7520  What performance tests and procedures must I use?

63.7521  What fuel analyses and procedures must I use?

63.7522  Can I use emission averaging to comply with this subpart?

63.7525  What are my monitoring, installation, operation, and maintenance requirements?

63.7530  How do I demonstrate initial compliance with the emission limits and work practice standards?

63.7535  How do I monitor and collect data to demonstrate continuous compliance?

63.7540  How do I demonstrate continuous compliance with the emission limits and work practice standards?

63.7541  How do I demonstrate continuous compliance under the emission averaging provision?

63.7545  What notifications must I submit and when?

63.7550  What reports must I submit and when?

63.7555  What records must I keep?

63.7560  In what form and how long must I keep my records?

63.7565  What parts of the General Provisions apply to me?

63.7570  Who implements and enforces this subpart?

63.7575  What definitions apply to this subpart?

63.7580  What are my general requirements for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

63.7585  Am I subject to this subpart?

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler or process heater as defined in § 63.7575 that is located at, or is part of, a major source of HAP as defined in § 63.7575 (40 CFR part 63, subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities), except as specified in § 63.7491.
process heater located at a major source as defined in §63.7575.

(b) A boiler or process heater is new if you commence construction of the boiler or process heater after January 13, 2003, and you meet the applicability criteria at the time you commence construction.

(c) A boiler or process heater is reconstructed if you meet the reconstruction criteria as defined in §63.2, you commence reconstruction after January 13, 2003, and you meet the applicability criteria at the time you commence reconstruction.

(d) A boiler or process heater is existing if it is not new or reconstructed.

§63.7491 Are any boilers or process heaters not subject to this subpart?

The types of boilers and process heaters listed in paragraphs (a) through (o) of this section are not subject to this subpart:

(a) A municipal waste combustor covered by 40 CFR part 60, subpart AAA, subpart BBBB, subpart Cb or subpart Eb.

(b) A hospital/medical/infectious waste incinerator covered by 40 CFR part 60, subpart Ce or subpart Ec.

(c) An electric utility steam generating unit that is a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity, and supplies more than one-third of its potential electric output capacity, and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit.

(d) A boiler or process heater required to have a permit under section 3005 of the Solid Waste Disposal Act or covered by 40 CFR part 63, subpart EEE (e.g., hazardous waste boilers).

(e) A commercial and industrial solid waste incineration unit covered by 40 CFR part 60, subpart CCC or subpart DDDD.

(f) A recovery boiler or furnace covered by 40 CFR part 63, subpart MM.

(g) A boiler or process heater that is used specifically for research and development. This does not include units that only provide heat or steam to a process at a research and development facility.

(h) A hot water heater as defined in this subpart.

(i) A refining kettle covered by 40 CFR part 63, subpart X.

(j) An ethylene cracking furnace covered by 40 CFR part 63, subpart YY.

(k) Blast furnace stoves as described in the EPA document, entitled “National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards.” (EPA–453/R–01–005).

(l) Any boiler and process heater specifically listed as an affected source in another standard(s) under 40 CFR part 63.

(m) Any boiler and process heater specifically listed as an affected source in another standard(s) established under section 129 of the Clean Air Act (CAA).

(n) Temporary boilers as defined in this subpart.

(o) Blast furnace gas fuel-fired boilers and process heaters as defined in this subpart.

§63.7495 When do I have to comply with this subpart?

(a) If you have a new or reconstructed boiler or process heater, you must comply with this subpart by November 12, 2004 or upon startup of your boiler or process heater, whichever is later.

(b) If you have an existing boiler or process heater, you must comply with this subpart no later than September 13, 2007.

(c) If you have an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP, paragraphs (c)(1) and (2) of this section apply to you.

(1) Any new or reconstructed boiler or process heater at the existing facility must be in compliance with this subpart upon startup.

(2) Any existing boiler or process heater at the existing facility must be in compliance with this subpart within 3 years after the facility becomes a major source.

(d) You must meet the notification requirements in §63.7545 according to the schedule in §63.7545 and in subpart A of this part. Some of the notifications must be submitted before you are required to comply with the emission limits and work practice standards in this subpart.

Emission Limits and Work Practice Standards

§63.7499 What are the subcategories of boilers and process heaters?

The subcategories of boilers and process heaters are large solid fuel, limited use solid fuel, small solid fuel, large liquid fuel, limited use liquid fuel, small liquid fuel, large gaseous fuel, limited use gaseous fuel, and small gaseous fuel. Each subcategory is defined in §63.7575.

§63.7500 What emission limits, work practice standards, and operating limits must I meet?

(a) You must meet the requirements in paragraphs (a)(1) and (2) of this section.

(1) You must meet each emission limit and work practice standard in Table 1 to this subpart that applies to your boiler or process heater, except as provided under §63.7507.

(2) You must meet each operating limit in Tables 2 through 4 to this subpart that applies to your boiler or process heater. If you use a control device or combination of control devices not covered in Tables 2 through 4 to this subpart, or you wish to establish and monitor an alternative operating limit and alternative monitoring parameters, you must apply to the United States Environmental Protection Agency (EPA) Administrator for approval of alternative monitoring under §63.8(f).

(b) As provided in §63.6(g), EPA may approve use of an alternative to the work practice standards in this section.

General Compliance Requirements

§63.7505 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits (including operating limits) and the work practice standards in this subpart at all times, except during periods of startup, shutdown, and malfunction.

(b) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

(c) You can demonstrate compliance with any applicable emission limit using fuel analysis if the emission rate calculated according to §63.7530(d) is less than the applicable emission limit. Otherwise, you must demonstrate compliance using performance testing.

(d) If you demonstrate compliance with any applicable emission limit through performance testing, you must develop a site-specific monitoring plan according to the requirements in paragraphs (d)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §63.8(f).

(1) For each continuous monitoring system (CMS) required in this section, you must develop and submit to the EPA Administrator for approval a site-specific monitoring plan that addresses paragraphs (d)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan at least 60 days
before your initial performance evaluation of your CMS,

(ii) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device); 

(iii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and

(iv) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

(2) In your site-specific monitoring plan, you must also address paragraphs (d)(2)(i) through (iii) of this section.

(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);

(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and

(iii) Ongoing recording and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).

(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

(e) If you have an applicable emission limit or work practice standard, you must implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in §63.6(e)(3).

§63.7506 Do any boilers or process heaters have limited requirements?

(a) New or reconstructed boilers and process heaters in the large liquid fuel subcategory or the limited use liquid fuel subcategory that burn only fossil fuels and other gases and do not burn any residual oil are subject to the emission limits and applicable work practice standards in Table 1 to this subpart. You are not required to conduct a performance test to demonstrate compliance with the emission limits. You are not required to set and maintain operating limits to demonstrate continuous compliance with the emission limits. However, you must meet the requirements in paragraphs (a)(1) and (2) of this section and meet the CO work practice standard in Table 1 to this subpart.

(1) To demonstrate initial compliance, you must include a signed statement in the Notification of Compliance Status report required in §63.7545(e) that indicates you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels.

(2) To demonstrate continuous compliance with the applicable emission limits, you must also keep records that demonstrate that you burn only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels. You must also include a signed statement in each semiannual compliance report required in §63.7550 that indicates you burned only liquid fossil fuels other than residual oils, either alone or in combination with gaseous fuels, during the reporting period.

(b) The affected boilers and process heaters listed in paragraphs (b)(1) through (3) of this section are subject to only the initial notification requirements in §63.9(b)(i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart or any other requirements in subpart A of this part).

(1) Existing large and limited use gaseous fuel units.

(2) Existing large and limited use liquid fuel units.

(3) New or reconstructed small liquid fuel units that burn only gaseous fuels or distillate oil. New or reconstructed small liquid fuel boilers and process heaters that commence burning of any other type of fuel must comply with all applicable requirements of this subpart and subsection A of this part upon startup of burning the other type of liquid fuel.

(c) The affected boilers and process heaters listed in paragraphs (c)(1) through (4) of this section are not subject to the initial notification requirements in §63.9(b) and are not subject to any requirements in this subpart or in subsection A of this part (i.e., they are not subject to the emission limits, work practice standards, performance testing, monitoring, SSMP plans, site-specific monitoring plans, recordkeeping and reporting requirements of this subpart, or any other requirements in subsection A of this part).

(1) Existing small solid fuel boilers and process heaters.

(2) Existing small liquid fuel boilers and process heaters.

(3) Existing small gaseous fuel boilers and process heaters.

(4) New or reconstructed small gaseous fuel units.

§63.7507 What are the health-based compliance alternatives for the hydrogen chloride (HCl) and total selected metals (TSM) standards?

(a) As an alternative to the requirement for large solid fuel boilers located at a single facility to demonstrate compliance with the HCl emission limit in Table 1 to this subpart, you may demonstrate eligibility for the health-based compliance alternative for HCl emissions under the procedures prescribed in appendix A to this subpart.

(b) In lieu of complying with the TSM emission standards in Table 1 to this subpart based on the sum of emissions for the eight selected metals, you may demonstrate eligibility for complying with the TSM emission standards in Table 1 based on the sum of emissions for seven selected metals (by excluding manganese emissions from the summation of TSM emissions) under the procedures prescribed in appendix A to this subpart.

Testing, Fuel Analyses, and Initial Compliance Requirements

§63.7510 What are my initial compliance requirements and by what date must I conduct them?

(a) For affected sources that elect to demonstrate compliance with any of the emission limits of this subpart through performance testing, your initial compliance requirements include conducting performance tests according to §63.7520 and Table 5 to this subpart, conducting a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart, establishing operating limits according to §63.7530 and Table 7 to this subpart, and conducting CMS performance evaluations according to §63.7525.

(b) For affected sources that elect to demonstrate compliance with the emission limits for HCl, mercury, or TSM through fuel analysis, your initial compliance requirement is to conduct a fuel analysis for each type of fuel burned in your boiler or process heater according to §63.7521 and Table 6 to this subpart and establish operating limits according to §63.7530 and Table 8 to this subpart.

(c) For affected sources that have an applicable work practice standard, your initial compliance requirements depend on the subcategory and rated capacity of your boiler or process heater. If your boiler or process heater is in any of the limited use subcategories or has a heat input capacity less than 100 MMBtu per hour, your initial compliance demonstration is conducting a performance test for carbon monoxide.
§ 63.7521 What fuel analyses and procedures must I use?

(a) You must conduct fuel analyses according to the procedures in paragraphs (b) through (e) of this section and Table 6 to this subpart, as applicable.

(b) You must develop and submit a site-specific fuel analysis plan to the EPA Administrator for review and approval according to the following procedures and requirements in paragraphs (b)(1) and (2) of this section.

(1) You must submit the fuel analysis plan no later than 60 days before the date that you intend to demonstrate compliance.

(2) You must include the information contained in paragraphs (b)(2)(i) through (vi) of this section.
the sample to a clean plastic bag.

(ii) Each composite sample will consist of a minimum of three samples collected at approximately equal intervals during the testing period.

(2) If sampling from a fuel pile or truck, collect fuel samples according to paragraphs (c)(2)(i) through (iii) of this section.

(i) For each composite sample, select a minimum of five sampling locations uniformly spaced over the surface of the pile:

(ii) At each sampling site, dig into the pile to a depth of 18 inches. Insert a clean flat square shovel into the hole and withdraw a sample, making sure that large pieces do not fall off during sampling.

(iii) Transfer all samples to a clean plastic bag for further processing.

(3) Make a pie shape with the entire composite sample over a clean plastic sheet.

(4) Separate one of the quarter subsamples from the composite sample and subdivide it into four equal parts.

(5) If this subset is too large for grinding, repeat the procedure in paragraph (d)(3) of this section with the quarter sample and obtain a one-quarter subset from this sample.

(6) Grind the sample in a mill.

(7) Use the procedure in paragraph (d)(3) of this section to obtain a one-quarter subsample for analysis. If the quarter sample is too large, subdivide it further using the same procedure.

(e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2) of this section.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option must be in compliance with the limits in Table 1 to this subpart at all times following the compliance date specified in §63.7495.

(e) You must demonstrate initial compliance according to paragraphs (e)(1) or (2) of this section.

(1) You must use Equation 1 of this section to demonstrate that the particulate matter or TSM, HCl, and mercury emissions from all existing large solid fuel boilers participating in the emissions averaging option do not exceed the emission limits in Table 1 to this subpart.
AveWeighted Emissions = \sum_{i=1}^{n} (Er \times Hm) + \sum_{i=1}^{n} Hm \quad \text{(Eq. 1)}

Where:
- AveWeighted = Average weighted emissions for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- Er = Emission rate, calculated according to Table 5 to this subpart or fuel analysis (as calculated by the applicable equation in §63.7530(d)) for boiler, i, for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- Hm = Maximum rated heat input capacity of boiler, i, in units of million Btu per hour.
- n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use

AveWeighted Emissions = \sum_{i=1}^{n} (Er \times Sm \times Cf) + \sum_{i=1}^{n} Sm \times Cf \quad \text{(Eq. 2)}

Where:
- AveWeighted = Average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- Sm = Maximum steam generation by boiler, i, in units of pounds.
- Cf = Conversion factor, calculated from the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(2) If you are not capable of monitoring heat input, you can use

AveWeighted Emissions = \sum_{i=1}^{n} (Er \times Hb) + \sum_{i=1}^{n} Hb \quad \text{(Eq. 3)}

Where:
- AveWeighted Emissions = 12-month rolling average weighted emission level for particulate matter or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- Hb = The average heat input for each calendar month of boiler, i, in units of million Btu.
- n = Number of large solid fuel boilers participating in the emissions averaging option.

(2) If you are not capable of monitoring heat input, you can use

AveWeighted Emissions = \sum_{i=1}^{n} (Er \times Sa \times Cf) + \sum_{i=1}^{n} Sa \times Cf \quad \text{(Eq. 4)}

Where:
- AveWeighted Emissions = 12-month rolling average weighted emission level for PM or TSM, HCl, or mercury, in units of pounds per million Btu of heat input.
- Sa = Actual steam generation for each calendar month by boiler, i, in units of pounds.
- Cf = Conversion factor, as calculated during the most recent compliance test, in units of million Btu of heat input per pounds of steam generated.

(g) You must develop and submit an implementation plan for emission averaging to the applicable regulatory authority for review and approval according to the following procedures and requirements in paragraphs (g)(1) through (4).
(1) You must submit the implementation plan no later than 180 days before the date that the facility intends to demonstrate compliance using the emission averaging option.

(2) You must include the information contained in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average:

(i) The identification of all existing large solid fuel boilers in the averaging group, including for each either the applicable HAP emission level or the control technology installed on;

(ii) The process parameter (heat input or steam generated) that will be monitored for each averaging group of large solid fuel boilers;

(iii) The specific control technology or pollution prevention measure to be used for each emission source in the averaging group and the date of its installation or application. If the pollution prevention measure reduces or eliminates emissions from multiple sources, the owner or operator must identify each source;

(iv) The test plan for the measurement of particulate matter (or TSM), HCl, or other pollution sources included in paragraphs (g)(2)(i) through (vii) of this section in your implementation plan for all emission sources included in an emissions average.

(v) The operating parameters to be monitored for each control system or device and a description of how the operating limits will be determined;

(vi) If you request to monitor an alternative operating parameter pursuant to §63.7525, you must also include:

(A) A description of the parameter(s) to be monitored and an explanation of the criteria used to select the parameter(s); and

(B) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device; the frequency and content of monitoring, reporting, and recordkeeping requirements; and a demonstration, to the satisfaction of the applicable regulatory authority, that the proposed monitoring frequency is sufficient to represent control device operating conditions; and

(vii) A demonstration that compliance with each of the applicable emission limit(s) will be achieved under representative operating conditions.

(3) Upon receipt, the regulatory authority shall review and approve or disapprove the plan according to the following criteria:

(i) Except for the content of the plan includes all of the information specified in paragraph (g)(2) of this section; and

(ii) Whether the plan presents sufficient information to determine that compliance will be achieved and maintained.

(4) The applicable regulatory authority shall not approve an emission averaging implementation plan containing any of the following provisions:

(i) Any averaging between emissions of differing pollutants or between differing sources; or

(ii) The inclusion of any emission source other than an existing large solid fuel boiler.

§63.7525 What are my monitoring, installation, operation, and maintenance requirements?

(a) If you have an applicable work practice standard for carbon monoxide, and your boiler or process heater is in any of the large subcategories and has a heat input capacity of 100 MMBtu per hour or greater, you must install, operate, and maintain a continuous emission monitoring system (CEMS) for carbon monoxide according to the procedures in paragraphs (a)(1) through (6) of this section by the compliance date specified in §63.7495.

(1) Each CEMS must be installed, operated, and maintained according to Performance Specification (PS) 4A of 40 CFR part 60, appendix B, and according to the site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each CEMS according to the requirements in §63.8 and according to PS 4A of 40 CFR part 60, appendix B.

(3) Each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(4) The CEMS data must be reduced as specified in §63.8(g)(2).

(5) You must calculate and record a 30-day rolling average emission rate on a daily basis. A new 30-day rolling average emission rate is calculated as the average of all of the hourly CO emission data for the preceding 30 operating days.

(6) For purposes of calculating data averages, you must not use data recorded during periods of monitoring malfunctions, associated repairs, out-of-control periods, required quality assurance or control activities, or when your boiler or process heater is operating at less than 50 percent of its rated capacity. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out of control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(b) If you have an applicable opacity operating limit, you must install, operate, certify and maintain each continuous opacity monitoring system (COMS) according to the procedures in paragraphs (b)(1) through (7) of this section by the compliance date specified in §63.7495.

(1) Each COMS must be installed, operated, and maintained according to PS 1 of 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each COMS according to the requirements in §63.8 and according to PS 1 of 40 CFR part 60, appendix B.

(3) As specified in §63.8(c)(4)(i), each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(4) The COMS data must be reduced as specified in §63.8(g)(2).

(5) You must include in your site-specific monitoring plan procedures and acceptance criteria for operating and maintaining each COMS according to the requirements in §63.8(d). At a minimum, the monitoring plan must include a daily calibration drift assessment, a quarterly performance audit, and an annual zero alignment audit of each COMS.

(6) You must operate and maintain each COMS according to the requirements in the monitoring plan and the requirements of §63.8(e). Identify periods the COMS is out of control including any periods that the COMS fails to pass a daily calibration drift assessment, a quarterly performance audit, or an annual zero alignment audit.

(7) You must determine and record all the 6-minute averages (and 1-hour block averages as applicable) collected for periods during which the COMS is not out of control.

(c) If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (c)(1) through (5) of this section by the compliance date specified in §63.7495.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) Except for monitoring malfunctions, associated repairs, and required quality assurance or control
activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation at all times that the unit is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(3) For purposes of calculating data averages, you must not use data recorded during monitoring malfunctions, associated repairs, out of control periods, or required quality assurance or control activities. You must use all the data collected during all other periods in assessing compliance. Any period for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

(4) Determine the 3-hour block average of all recorded readings, except as provided in paragraph (c)(3) of this section.

(5) Record the results of each inspection, calibration, and validation check.

(d) If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (c) and (d)(1) through (4) of this section.

(1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.

(2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.

(3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(4) Conduct a flow sensor calibration check at least semiannually.

(e) If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (c) and (e)(1) through (6) of this section.

(1) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.

(2) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(3) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.

(4) Check pressure tap pluggage daily.

(5) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(6) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(f) If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (c) and (f)(1) through (3) of this section.

(1) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(2) Ensure the sample is properly mixed and representative of the fluid to be measured.

(3) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(g) If you have an operating limit that requires the use of equipment to monitor voltage and secondary current (or total power input) of an electrostatic precipitator (ESP), you must use voltage and secondary current monitoring equipment to measure voltage and secondary current to the ESP.

(h) If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (c) and (h)(1) through (3) of this section.

(1) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(2) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(3) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(i) If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (i)(1) through (8) of this section.

(1) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(2) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA–454/R–98–015, September 1997.

(3) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 milligrams per actual cubic meter or less.

(4) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(5) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(6) The bag leak detection system must be equipped with an alarm system that will sound automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

§ 63.7530 How do I demonstrate initial compliance with the emission limits and work practice standards?

(a) You must demonstrate initial compliance with each emission limit and work practice standard that applies to you by either conducting initial performance tests and establishing operating limits, as applicable, according to § 63.7520, paragraph (c) of this section, and Tables 5 and 7 to this subpart OR conducting initial fuel analyses to determine emission rates and establishing operating limits, as applicable, according to § 63.7521, paragraph (d) of this section, and Tables 6 and 8 to this subpart.

(b) New or reconstructed boilers or process heaters in one of the liquid fuel subcategories that burn only fossil fuels and other gases and do not burn any residual oil must demonstrate compliance according to § 63.7506(a).

(c) If you demonstrate compliance through performance testing, you must establish each site-specific operating limit in Tables 2 through 4 to this subpart that applies to you according to the requirements in § 63.7520, Table 7 to this subpart, and paragraph (c)(4) of this section, as applicable. You must also conduct fuel analyses according to § 63.7521 and establish maximum fuel pollutant input levels according to paragraphs (c)(1) through (3) of this section, as applicable.

(1) You must establish the maximum chlorine fuel input ($C_{input}$) during the initial performance testing according to the procedures in paragraphs (c)(1)(i) through (iii) of this section.

(2) You must determine the fuel type or fuel mixture that you could burn in
your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for HCl, you must determine the fraction of the total heat input for each fuel type burned ($Q_i$) based on the fuel mixture that has the highest content of chlorine, and the average chlorine concentration of each fuel type burned ($C_i$).

(iii) You must establish a maximum chlorine input level using Equation 5 of this section.

$$\text{Cl}_{\text{input}} = \sum_{i=1}^{n} \left[ (C_i)(Q_i) \right] \quad (\text{Eq. 5})$$

Where:
\begin{itemize}
  \item $\text{Cl}_{\text{input}} =$ Maximum amount of chlorine entering the boiler or process heater through fuels burned in units of pounds per million Btu.
  \item $C_i =$ Arithmetic average concentration of chlorine in fuel type, $i$, analyzed according to §63.7521, in units of pounds per million Btu.
  \item $Q_i =$ Fraction of total heat input from fuel type, $i$, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for $Q_i$. 
  \item $n =$ Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.
\end{itemize}

(2) If you choose to comply with the alternative TSM emission limit instead of the particulate matter emission limit, you must establish the maximum TSM fuel input level ($\text{TSM}_{\text{input}}$) during the initial performance testing according to the procedures in paragraphs (c)(2)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of chlorine.

(ii) During the performance testing for TSM, you must determine the fraction of total heat input from each fuel burned ($Q_i$) based on the fuel mixture that has the highest content of total selected metals, and the average TSM concentration of each fuel type burned ($M_i$).

(iii) You must establish a baseline TSM input level using Equation 6 of this section.

$$\text{TSM}_{\text{input}} = \sum_{i=1}^{n} \left[ (M_i)(Q_i) \right] \quad (\text{Eq. 6})$$

Where:
\begin{itemize}
  \item $\text{TSM}_{\text{input}} =$ Maximum amount of TSM entering the boiler or process heater through fuels burned in units of pounds per million Btu.
  \item $M_i =$ Arithmetic average concentration of TSM in fuel type, $i$, analyzed according to §63.7521, in units of pounds per million Btu.
  \item $Q_i =$ Fraction of total heat input from fuel type, $i$, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for $Q_i$.
  \item $n =$ Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of TSM.
\end{itemize}

(3) You must establish the maximum mercury fuel input level ($\text{Mercury}_{\text{input}}$) during the initial performance testing using the procedures in paragraphs (c)(3)(i) through (iii) of this section.

(i) You must determine the fuel type or fuel mixture that you could burn in your boiler or process heater that has the highest content of mercury.

(ii) During the compliance demonstration for mercury, you must determine the fraction of total heat input for each fuel burned ($Q_i$) based on the fuel mixture that has the highest content of mercury, and the average mercury concentration of each fuel type burned ($HG_i$).

(iii) You must establish a maximum mercury input level using Equation 7 of this section.

$$\text{Mercury}_{\text{input}} = \sum_{i=1}^{n} \left[ (HG_i)(Q_i) \right] \quad (\text{Eq. 7})$$

Where:
\begin{itemize}
  \item $\text{Mercury}_{\text{input}} =$ Maximum amount of mercury entering the boiler or process heater through fuels burned in units of pounds per million Btu.
  \item $HG_i =$ Arithmetic average concentration of mercury in fuel type, $i$, analyzed according to §63.7521, in units of pounds per million Btu.
  \item $Q_i =$ Fraction of total heat input from fuel type, $i$, based on the fuel mixture that has the highest mercury content. If you do not burn multiple fuel types during the performance test, it is not necessary to determine the value of this term. Insert a value of “1” for $Q_i$.
  \item $n =$ Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.
\end{itemize}

(4) You must establish parameter operating limits according to paragraphs (c)(4)(i) through (iv) of this section.

(i) For a wet scrubber, you must establish the minimum scrubber effluent pH, liquid flowrate, and pressure drop as defined in §63.7575, as your operating limits during the three-run performance test. If you use a wet scrubber and you conduct separate performance tests for particulate matter, HCl, and mercury emissions, you must establish one set of minimum scrubber effluent pH, liquid flowrate, and pressure drop operating limits. The minimum scrubber effluent pH operating limit must be established during the HCl performance test. If you conduct multiple performance tests, you must set the minimum liquid flowrate and pressure drop operating limits at the highest minimum values established during the performance tests.

(ii) For an electrostatic precipitator, you must establish the minimum voltage and secondary current (or total power input), as defined in §63.7575, as your operating limits during the three-run performance test.

(iii) For a dry scrubber, you must establish the minimum sorbent injection rate, as defined in §63.7575, as your operating limit during the three-run performance test.

(iv) The operating limit for boilers or process heaters with fabric filters that choose to demonstrate continuous compliance through bag leak detection systems is that a bag leak detection system be installed according to the requirements in §63.7525, and that each fabric filter must be operated such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period.

(d) If you elect to demonstrate compliance with an applicable emission limit through fuel analysis, you must conduct fuel analyses according to §63.7521 and follow the procedures in paragraphs (d)(1) through (5) of this section.

(1) If you burn more than one fuel type, you must determine the fuel mixture you could burn in your boiler or process heater that would result in the maximum emission rates of the pollutants that you elect to demonstrate compliance through fuel analysis.

(2) You must determine the 90th percentile confidence level fuel pollutant concentration of the composite samples analyzed for each fuel type using the one-sided z-statistic test described in Equation 8 of this section.

$$P_{90} = \text{mean} + (\text{SD} \times t) \quad (\text{Eq. 8})$$

Where:
\begin{itemize}
  \item $P_{90} =$ 90th percentile confidence level pollutant concentration, in pounds per million Btu.
must be less than the applicable emission limit for TSM.

1.028 = Molecular weight ratio of HCl to chlorine.

\( TSM = \sum_{i=1}^{n} \left[ M_{90}(i) \right] \)  
(eq. 10)

Where:

\( TSM = \) TSM emission rate from the boiler or process heater in units of pounds per million Btu.

\( M_{90} = \) 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

\( Q_i = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of total selected metals. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q_i \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( t = \) t distribution critical value for 90th percentile confidence level 

\( t_{90} = \) 90th percentile confidence level

\( Q = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q \).

\( n = \) Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

1.028 = Molecular weight ratio of HCl to chlorine.

\( \text{mean} = \) Arithmetic average of the fuel pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

\( \text{SD} = \) Standard deviation of the pollutant concentration in the fuel samples analyzed according to §63.7521, in units of pounds per million Btu.

\( t = \) t distribution critical value for 90th percentile (0.1) probability for the appropriate degrees of freedom (number of samples minus one) as obtained from a Distribution Critical Value Table.

(3) To demonstrate compliance with the applicable emission limit for HCl, the HCl emission rate that you calculate for your boiler or process heater using Equation 9 of this section must be less than the applicable emission limit for HCl.

\[
\text{HCl} = \sum_{i=1}^{n} \left[ (C_{90})(Q_i)(1.028) \right] 
\]

(eq. 9)

Where:

\( \text{HCl} = \) HCl emission rate from the boiler or process heater in units of pounds per million Btu.

\( C_{90} = \) 90th percentile confidence level concentration of chlorine in fuel type, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

\( Q_i = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of chlorine. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q_i \).

\( n = \) Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of chlorine.

\( 1.028 = \) Molecular weight ratio of HCl to chlorine.

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( t = \) t distribution critical value for 90th percentile confidence level 

\( t_{90} = \) 90th percentile confidence level

\( Q = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of mercury. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q \).

\( n = \) Number of different fuel types burned in your boiler or process heater for the mixture that has the highest content of mercury.

\( \text{Mercury} = \sum_{i=1}^{n} \left[ (HG_{90})(Q_i) \right] 
\]

(eq. 11)

Where:

\( \text{Mercury} = \) Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

\( HG_{90} = \) 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

\( Q_i = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of mercury. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q_i \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( 0.1 = \) 90th percentile confidence level

(5) To demonstrate compliance with the applicable emission limit for mercury, the mercury emission rate that you calculate for your boiler or process heater using Equation 11 of this section must be less than the applicable emission limit for mercury.

\( \text{Mercury} = \sum_{i=1}^{n} \left[ (HG_{90})(Q_i) \right] 
\]

(eq. 11)

Where:

\( \text{Mercury} = \) Mercury emission rate from the boiler or process heater in units of pounds per million Btu.

\( HG_{90} = \) 90th percentile confidence level concentration of mercury in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

\( Q_i = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of mercury. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q_i \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( 0.1 = \) 90th percentile confidence level

\( t_{90} = \) 90th percentile confidence level

\( Q = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( 1.028 = \) Molecular weight ratio of HCl to chlorine.

\( \text{TSM} = \sum_{i=1}^{n} \left[ (M_{90})(Q_i) \right] 
\]

(eq. 10)

Where:

\( \text{TSM} = \) TSM emission rate from the boiler or process heater in units of pounds per million Btu.

\( M_{90} = \) 90th percentile confidence level concentration of TSM in fuel, i, in units of pounds per million Btu as calculated according to Equation 8 of this section.

\( Q_i = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q_i \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

\( t_{90} = \) 90th percentile confidence level

\( Q = \) Fraction of total heat input from fuel type, i, based on the fuel mixture that has the highest content of TSM. If you do not burn multiple fuel types, it is not necessary to determine the value of this term. Insert a value of “1” for \( Q \).

\( n = \) Number of different fuel types burned in your boiler or process heater during the monitoring period.

(5) To demonstrate compliance with the applicable emission limit for TSM, the TSM emission rate that you calculate for your boiler or process heater using Equation 10 of this section must be less than the applicable emission limit for TSM.
(i) You must determine the chlorine concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of chlorine.

(iii) Recalculate the HCl emission rate from your boiler or process heater under these new conditions using Equation 5 of §63.7530. The recalculated HCl emission rate must be less than the applicable emission limit.

(4) If you demonstrate compliance with an applicable HCl emission limit through performance testing and you plan to burn a new type of fuel type or a new mixture of fuels, you must recalculate the maximum chlorine input using Equation 5 of §63.7530. If the results of recalculating the maximum chlorine input using Equation 5 of §63.7530 are higher than the maximum chlorine established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the HCl emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the provisions in §63.7530(c).

(i) You must determine the mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(5) If you demonstrate compliance with an applicable TSM emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the TSM emission rate using Equation 10 of §63.7530 according to the procedures specified in paragraphs (a)(5)(i) through (iii) of this section.

(i) You must determine the TSM concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of TSM.

(iii) Recalculate the TSM emission rate from your boiler or process heater under these new conditions using Equation 10 of §63.7530. The recalculated TSM emission rate must be less than the applicable emission limit.

(6) If you demonstrate compliance with an applicable TSM emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum TSM input using Equation 6 of §63.7530. If the results of recalculating the maximum total selected metals input using Equation 6 of §63.7530 are higher than the maximum TSM input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the TSM emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(7) If you demonstrate compliance with an applicable mercury emission limit through fuel analysis, and you plan to burn a new type of fuel, you must recalculate the mercury emission rate using Equation 11 of §63.7530 according to the procedures specified in paragraphs (a)(7)(i) through (iii) of this section.

(i) You must determine the maximum mercury concentration for any new fuel type in units of pounds per million Btu, based on supplier data or your own fuel analysis, according to the provisions in your site-specific fuel analysis plan developed according to §63.7521(b).

(ii) You must determine the new mixture of fuels that will have the highest content of mercury.

(iii) Recalculate the mercury emission rate from your boiler or process heater under these new conditions using Equation 11 of §63.7530. The recalculated mercury emission rate must be less than the applicable emission limit.

(8) If you demonstrate compliance with an applicable mercury emission limit through performance testing, and you plan to burn a new type of fuel or a new mixture of fuels, you must recalculate the maximum mercury input using Equation 7 of §63.7530. If the results of recalculating the maximum mercury input using Equation 7 of §63.7530 are higher than the maximum mercury input level established during the previous performance test, then you must conduct a new performance test within 60 days of burning the new fuel type or fuel mixture according to the procedures in §63.7520 to demonstrate that the mercury emissions do not exceed the emission limit. You must also establish new operating limits based on this performance test according to the procedures in §63.7530(c).

(9) If your unit is controlled with a fabric filter, and you demonstrate continuous compliance using a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions according to your SSMP, and operate and maintain the fabric filter system such that the alarm does not sound more than 5 percent of the operating time during a 6-month period. You must also keep records of the date, time, and duration of each alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. You must also record the percent of the operating time during each 6-month period that the alarm sounds. In calculating this operating time percentage, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted. If corrective action is required, each alarm shall be counted as a minimum of 1 hour. If you take longer than 1 hour to initiate corrective action, the alarm time shall be counted as the actual amount of time taken to initiate corrective action.

(10) If you have an applicable work practice standard for carbon monoxide, and you require to install a CEMS according to §63.7525(a), then you must meet the requirements in paragraphs (a)(10)(i) through (iii) of this section.

(i) You must continuously monitor carbon monoxide according to §§63.7525(a) and 63.7535.

(ii) Maintain a carbon monoxide emission level below your applicable carbon monoxide work practice standard in Table 1 to this subpart at all times except during periods of startup, shutdown, malfunction, and when your boiler or process heater is operating at less than 50 percent of rated capacity.

(iii) Keep records of carbon monoxide levels according to §63.7555(b).

(b) You must report each instance in which you did not meet each emission limit, operating limit, and work practice standard in Tables 1 through 4 to this subpart that apply to you. You must also report each instance during a startup, shutdown, or malfunction when you did not meet each applicable emission limit, operating limit, and work practice standard. These instances are deviations from the emission limits and work practice standards in this subpart. These deviations must be reported according to the requirements in §63.7550.

(c) During periods of startup, shutdown, and malfunction, you must operate in accordance with the SSMP as required in §63.7505(e).

(d) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the EPA Administrator’s satisfaction that you were operating in accordance with your SSMP. The EPA Administrator will determine whether
deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in §63.6(e).

§63.7541 How do I demonstrate continuous compliance under the emission averaging provision?

(a) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of paragraphs (b)(1) through (4) of this section.

(1) For each calendar month, demonstrate compliance with the average weighted emissions limit for the existing large solid fuel boilers participating in the emissions averaging option as determined in §63.7522(f) and (g);

(2) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a dry control system, maintain opacity at or below the applicable limit;

(3) For each existing solid fuel boiler participating in the emissions averaging option that is equipped with a wet scrubber, maintain the 3-hour average parameter values at or below the operating limits established during the most recent performance test; and

(4) For each existing solid fuel boiler participating in the emissions averaging option that has an approved alternative operating plan, maintain the 3-hour average parameter values at or below the operating limits established in the most recent performance test.

(b) Any instance where the owner or operator fails to comply with the continuous monitoring requirements in paragraphs (a)(1) through (4) of this section, except during periods of startup, shutdown, and malfunction, is a deviation.

Notification, Reports, and Records

§63.7545 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.

(b) As specified in §63.9(b)(2), if you startup your affected source before November 12, 2004, you must submit an Initial Notification not later than 120 days after November 12, 2004. The Initial Notification must include the information required in paragraphs (b)(1) and (2) of this section, as applicable.

(c) If your affected source has an annual capacity factor of greater than 10 percent, your Initial Notification must include the information required by §63.9(b)(2).

(1) If your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent such that the unit is in one of the limited use subcategories (the limited use solid fuel subcategory, the limited use liquid fuel subcategory, or the limited use gaseous fuel subcategory), your Initial Notification must include the information required by §63.9(b)(2) and also a signed statement indicating your affected source has a federally enforceable permit that limits the annual capacity factor to less than or equal to 10 percent.

(d) As specified in §63.9(b)(4) and (b)(5), if you startup your new or reconstructed affected source on or after November 12, 2004, you must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source.

(e) If you are required to conduct a performance test you must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin.

(f) If you are required to conduct an initial compliance demonstration as specified in §63.7530(a), you must submit a Notification of Compliance Status according to §63.9(b)(2)(ii). For each initial compliance demonstration, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of the performance test and/or other initial compliance demonstrations according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (9), as applicable.

(1) A description of the affected source(s) including identification of which subcategory the source is in, the capacity of the source, a description of the add-on controls used on the source description of the fuel(s) burned, and justification for the fuel(s) burned during the performance test.

(2) Summary of the results of all performance tests, fuel analyses, and calculations conducted to demonstrate initial compliance including all established operating limits.

(3) Identification of whether you are complying with the particulate matter emission limit or the alternative total selected metals emission limit.

(4) Identification of whether you plan to demonstrate compliance with each applicable emission limit through performance testing or fuel analysis.

(5) Identification of whether you plan to demonstrate compliance by emissions averaging.

(6) A signed certification that you have met all applicable emission limits and work practice standards.

(7) A summary of the carbon monoxide emissions monitoring data and the maximum carbon monoxide emission levels recorded during the performance test to show that you have met any applicable work practice standard in Table 1 to this subpart.

(8) If your new or reconstructed boiler or process heater is in one of the liquid fuel subcategories and burns only liquid fossil fuels other than residual oil either alone or in combination with gaseous fuels, you must submit a signed statement certifying this in your Notification of Compliance Status report.

(9) If you had a deviation from any emission limit or work practice standard, you must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report.

§63.7550 What reports must I submit and when?

(a) You must submit each report in Table 9 to this subpart that applies to you.

(b) Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.7495 and ending on June 30 or December 31, whichever date is the first date that occurs at least 180 days after the compliance date that is specified for your source in §63.7495.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.7495.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered
no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) The compliance report must contain the information required in paragraphs (c)(1) through (11) of this section.

(1) Company name and address.

(2) Statement by a responsible official with that official’s name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel and the total fuel usage amount with units of measure.

(5) A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during this test, if applicable.

(6) A signed statement indicating that you burned no new types of fuel. Or, if you did burn a new type of fuel, you must submit the calculation of chlorine input, using Equation 5 of §63.7530, that demonstrates that your source is still within its maximum chlorine input level established during the previous performance testing (for sources that demonstrate compliance through performance testing) or you must submit the calculation of HCl emission rate using Equation 9 of §63.7530 that demonstrates that your source is still meeting the emission limit for HCl emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

If you burned a new type of fuel, you must submit the calculation of mercury input, using Equation 7 of §63.7530, that demonstrates that your source is still within its maximum mercury input level established during the previous performance testing (for sources that demonstrate compliance through performance testing), or you must submit the calculation of mercury emission rate using Equation 11 of §63.7530 that demonstrates that your source is still meeting the emission limit for mercury emissions (for boilers or process heaters that demonstrate compliance through fuel analysis).

(7) If you wish to burn a new type of fuel and you can not demonstrate compliance with the maximum chlorine input operating limit using Equation 5 of §63.7530, the maximum TSM input operating limit using Equation 6 of §63.7530, or the maximum mercury input operating limit using Equation 7 of §63.7530, you must include in the compliance report a statement indicating the intent to conduct a new performance test within 60 days of starting to burn the new fuel.

(8) The hours of operation for each boiler and process heater that is subject to an emission limit for each calendar month within the semiannual reporting period. This requirement applies only to limited use boilers and process heaters.

(9) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in §63.10(d)(5)(i).

(10) If there are no deviations from any emission limits or operating limits in this subpart that apply to you, and there are no deviations from the requirements for work practice standards in this subpart, a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.

(11) If there were no periods during which the CMSs were out of control during the period the CMSs were out of control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out of control during the reporting period.

(d) For each deviation from an emission limit or operating limit in this subpart and for each deviation from the requirements for work practice standards in this subpart that occurs at an affected source where you are not using a CMSs to comply with that emission limit, operating limit, or work practice standard, the compliance report must contain the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (d)(1) through (4) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) A description of the deviation and which emission limit, operating limit, or work practice standard from which you deviated.

(3) Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken.

(4) A copy of the test report if the annual performance test showed a deviation from the emission limit for particulate matter or the alternative TSM limit, a deviation from the HCl emission limit, or a deviation from the mercury emission limit.

(e) For each deviation from an emission limitation and operating limit or work practice standard in this subpart occurring at an affected source where you are using a CMS to comply with that emission limit, operating limit, or work practice standard, you must include the information in paragraphs (c)(1) through (10) of this section and the information required in paragraphs (e)(1) through (12) of this section. This includes periods of startup, shutdown, and malfunction and any deviations from your site-specific monitoring plan as required in §63.7505(d).

(1) The date and time that each malfunction started and stopped and description of the nature of the deviation (i.e., what you deviated from).

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems,
process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMSs downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each parameter that was monitored at the affected source for which there was a deviation, including opacity, carbon monoxide, and operating parameters for wet scrubbers and other control devices.

(9) A brief description of the source for which there was a deviation.

(10) A brief description of each CMS for which there was a deviation.

(11) The date of the latest CMS certification or audit for the system for which there was a deviation.

(12) A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation.

(1) An affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). An affected source submits a compliance report pursuant to Table 9 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority.

(g) If you operate a new gaseous fuel unit that is subject to the work practice standard in Table 1 to this subpart, you intend to use a fuel other than natural gas or equivalent to fire the affected unit, you must submit a notification of alternative fuel use within 48 hours of the declaration of a period of natural gas curtailment or supply interruption, as defined in §63.7575. The notification must include the information specified in paragraphs (g)(1) through (5) of this section.

(1) Company name and address.

(2) Identification of the affected unit.

(3) If you are unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared or the natural gas supply interruption began.

(4) Type of alternative fuel that you intend to use.

(5) Dates when the alternative fuel use is expected to begin and end.

§63.7555 What records must I keep?

(a) You must keep records according to paragraphs (a)(1) through (3) of this section.

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in §63.10(b)(2)(xv). Records described in §63.10(b)(2)(v) related to startup, shutdown, and malfunction.

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests, fuel analyses, or other compliance demonstrations, opacity observations as required in §63.10(b)(4)(vi).

(b) For each CEMS, CPMS, and COMS, you must keep records according to paragraphs (b)(1) through (5) of this section.

(1) Records described in §63.10(b)(2) (vi) through (xi).

(2) Monitoring data for continuous opacity monitoring system during a performance evaluation as required in §63.6(e)(2)(ii).

(3) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(4) Request for alternatives to relative accuracy test for CEMS as required in §63.8(f)(6)(i).

(5) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required in Table 8 to this subpart including records of all monitoring data and calculated averages for applicable operating limits such as opacity, pressure drop, carbon monoxide, and pH to show continuous compliance with each emission limit, operating limit, and work practice standard that applies to you.

(d) For each boiler or process heater subject to an emission limit, you must also keep the records in paragraphs (d)(1) through (5) of this section.

(1) You must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used.

(2) You must keep records of monthly hours of operation by each boiler or process heater. This requirement applies only to limited-use boilers and process heaters.

(3) A copy of all calculations and supporting documentation of maximum chloride fuel input, using Equation 5 of §63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of HCl emission rates, using Equation 9 of §63.7530, that were done to demonstrate compliance with the HCl emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chloride fuel input or HCl emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate chloride fuel input, or HCl emission rate, for each boiler and process heater.

(4) A copy of all calculations and supporting documentation of maximum TSM fuel input, using Equation 6 of §63.7530, that were done to demonstrate continuous compliance with the TSM emission limit for sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of TSM emission rates, using Equation 10 of §63.7530, that were done to demonstrate compliance with the TSM emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum TSM fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate TSM fuel input, or TSM emission rate, for each boiler and process heater.

(5) A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 7 of §63.7530, that were done to demonstrate continuous compliance with the mercury emission limit for sources that demonstrate compliance through performance testing. For sources that demonstrate compliance through fuel analysis, a copy of all calculations and supporting documentation of mercury emission rates, using Equation 11 of §63.7530, that were done to demonstrate compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or TSM emission rates. You can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, you must calculate mercury fuel input, or TSM emission rate, for each boiler and process heater.
include results of any fuel analyses and
basis for the estimates of maximum
mercury fuel input or mercury emission
rates. You can use the results from one
fuel analysis for multiple boilers and
process heaters provided they are all
burning the same fuel type. However,
you must calculate mercury fuel input,
or mercury emission rates, for each
boiler and process heater.

(e) If your boiler or process heater is
subject to an emission limit or work
practice standard in Table 1 to this
subpart and has a federally enforceable
permit that limits the annual capacity
factor to less than or equal to 10 percent
such that the unit is in one of the
limited use subcategories, you must
keep the records in paragraphs (e)(1)
and (2) of this section.

(1) A copy of the federally enforceable
permit that limits the annual capacity
factor of the source to less than or equal
to 10 percent.

(2) Fuel use records for the days the
boiler or process heater was operating.

§ 63.7560 In what form and how long must
I keep my records?

(a) Your records must be in a form
suitable and readily available for
expeditious review, according to
§ 63.10(b)(1). You can keep

(b) As specified in § 63.10(b)(1), you
must keep each record for 5 years
following the date of each occurrence,
measurement, maintenance, corrective
action, report, or record.

(c) You must keep each record on site
for at least 2 years after the date of each
occurrence, measurement, maintenance,
corrective action, report, or record,
according to § 63.10(b)(1). You can keep
the records off site for the remaining 3
years.

Other Requirements and Information

§ 63.7565 What parts of the General
Provisions apply to me?

Table 10 to this subpart shows which
parts of the General Provisions in
§§ 63.1 through 63.15 apply to you.

§ 63.7570 Who implements and enforces
this subpart?

(a) This subpart can be implemented
and enforced by U.S. EPA, or a
delegated authority such as your State,
local, or tribal agency. If the EPA
Administrator has delegated authority to
your State, local, or tribal agency, then
that agency (as well as the U.S. EPA) has
the authority to implement and enforce
this subpart. You should contact your
EPA Regional Office to find out if
this subpart is delegated to your State, local,
or tribal agency.

(b) In delegating implementation and
enforcement authority of this subpart to
a State, local, or tribal agency under 40
CFR part 63, subpart E, the authorities
listed in paragraphs (b)(1) through (5) of
this section are retained by the EPA
Administrator and are not transferred to
the State, local, or tribal agency,
however, the U.S. EPA retains oversight
of this subpart and can take enforcement
actions, as appropriate.

(1) Approval of alternatives to the
non-opacity emission limits and work
practice standards in § 63.7500(a) and
(b) under § 63.6(g).

(2) Approval of alternative opacity
emission limits in § 63.7500(a) under
§ 63.6(h)(9).

(3) Approval of major change to test
methods in Table 5 to this subpart
under § 63.7(e)(2)(ii) and (f) and as
defined in § 63.90.

(4) Approval of major change to
monitoring under § 63.8(f) and as
defined in § 63.90.

(5) Approval of major change to
recordkeeping and reporting under
§ 63.10(f) and as defined in § 63.90.

§ 63.7575 What definitions apply to this
subpart?

Terms used in this subpart are defined in the CAA, in § 63.2 (the
General Provisions), and in this section as follows:

Annual capacity factor means the ratio between the actual heat input to a
boiler or process heater from the fuels burned during a calendar year, and the
potential heat input to the boiler or process heater had it been operated for
8,760 hours during a year at the maximum steady state design heat input
capacity.

Bag leak detection system means an instrument that is capable of monitoring
particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse)
in order to detect bag failures. A bag leak detection system includes, but is
not limited to, an instrument that operates on electrolydynamic,
triboelectric, light scattering, light
transmittance, or other principle to
monitor relative particulate matter
loadings.

Biomass fuel means unadulterated
wood as defined in this subpart, wood
residue, and wood products (e.g., trees,
tree stumps, tree limbs, bark, lumber,
sawdust, sanderdust, chips, scraps,
slabs, millings, and shavings); animal
litter; vegetative agricultural and
silvicultural materials, such as logging
residues (slash), nut and grain hulls and
chaff (e.g., almond, walnut, peanut, rice,
and wheat), bagasse, orchard prunings,
corn stalks, coffee bean hulls and
granulals.

Blast furnace gas fuel-fired boiler or
process heater means an industrial/
material, salt water laden wood, creosote treated wood, tires, residual oil. Individual fuel types received from different suppliers are not considered new fuel types except for construction/demolition material.

Gaseous fuel includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, and biogas. Blast furnace gas is exempted from this definition.

Heat input means heat derived from combustion of fuel in a boiler or process heater and does not include the heat input from preheated combustion air, recirculated flue gases, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns, etc.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210°F (99°C).

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide steam, hot water, and/or electricity.

Large gaseous fuel subcategory includes any watertube boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual average capacity factor of greater than 10 percent.

Large liquid fuel subcategory includes any watertube boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, has a rated capacity of greater than 10 MMBtu per hour heat input, and has an annual average capacity factor of greater than 10 percent. Limited use gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Liquid fossil fuel means petroleum, distillate oil, residual oil and any form of liquid fuel derived from such material.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

Minimum pressure drop means 90 percent of the lowest test-run average pressure drop measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum scrubber effluent pH means 90 percent of the lowest test-run average effluent pH measured at the outlet of the wet scrubber according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable hydrogen chloride emission limit.

Minimum scrubber flow rate means 90 percent of the lowest test-run average flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limit.

Minimum sorbent flow rate means 90 percent of the lowest test-run average sorbent (or activated carbon) flow rate measured according to Table 7 to this subpart during the most recent performance test demonstrating compliance with the applicable emission limits.
Principal constituent is methane; or

Natural gas means:
(1) A naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the earth’s surface, of which the principal constituent is methane; or
(2) Liquid petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835–03a, “Standard Specification for Liquid Petroleum Gases” (incorporated by reference, see §63.14(b)).

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an alternative method.

Period of natural gas curtailment or supply interruption means a period of time during which the supply of natural gas to an affected facility is halted for reasons beyond the control of the facility. An increase in the cost or unit price of natural gas does not constitute a period of natural gas curtailment or supply interruption.

Process heater means an enclosed device using controlled flame, that is not a boiler, and the unit’s primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for on-site consumption, or autoclaves.

Residual oil means crude oil, and all fuel oil numbers 4, 5 and 6, as defined by the American Society for Testing and Materials in ASTM D396–02a, “Standard Specifications for Fuel Oils I” (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in 40 CFR 70.2.

Small gaseous fuel subcategory includes any firetube boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and any boiler or process heater that burns gaseous fuels not combined with any solid fuels, burns liquid fuel only during periods of gas curtailment or gas supply emergencies, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input.

Small liquid fuel subcategory includes any firetube boiler that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and any boiler or process heater that does not burn any solid fuel and burns any liquid fuel either alone or in combination with gaseous fuels, and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Small gaseous fuel boilers and process heaters that burn liquid fuel during periods of gas curtailment or gas supply emergencies are not included in this definition.

Small solid fuel subcategory includes any firetube boiler that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels, and any other boiler or process heater that burns any amount of solid fuel either alone or in combination with liquid or gaseous fuels and has a rated capacity of less than or equal to 10 MMBtu per hour heat input. Solid fuel includes, but is not limited to, coal, wood, biomass, tires, plastics, and other non-fossil solid materials. Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another. A temporary boiler that remains at a location for more than 180 consecutive days is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

Total selected metals means the combination of the following metallic HAP: arsenic, beryllium, cadmium, chromium, lead, manganese, nickel and selenium.

Unadulterated wood means wood or wood products that have not been painted, pigment-stained, or pressure treated with compounds such as chromate copper arsenate, pentachlorophenol, and creosote. Plywood, particle board, oriented strand board, and other types of wood products bound by glues and resins are included in this definition.

Waste heat boiler means a device that recovers normally unused energy and converts it to usable heat. Waste heat boilers incorporating duct or supplemental burners that are designed to supply 50 percent or more of the total rated heat input capacity of the waste heat boiler are not considered waste heat boilers, but are considered boilers. Waste heat boilers are also referred to as heat recovery steam generators.

Watertube boiler means a boiler in which water passes through the tubes and hot gases of combustion pass over the outside surfaces of the tubes.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler or process heater to control emissions of particulate matter and/or to absorb and neutralize acid gases, such as hydrogen chloride.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Table 1 to Subpart DDDDD of Part 63—Emission Limits and Work Practice Standards

As stated in §63.7500, you must comply with the following applicable emission limits and work practice standards:

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>You must meet the following emission limits and work practice standards . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. New or reconstructed large solid fuel . . .</td>
<td>a. Particulate Matter (or Total Selected Metals) . . .</td>
<td>0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride . . . . . . .</td>
<td>0.02 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>c. Mercury . . . . . . . . . . . .</td>
<td>0.000003 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>d. Carbon Monoxide . . . . . . . .</td>
<td>400 ppm by volume on a dry basis corrected to 7 percent oxygen (30-day rolling average for units 100 MMBtu/hr or greater, 3-run average for units less than 100 MMBtu/hr).</td>
</tr>
</tbody>
</table>
TABLE 1 TO SUBPART DDDDD OF PART 63.—EMISSION LIMITS AND WORK PRACTICE STANDARDS—Continued
As stated in §63.7500, you must comply with the following applicable emission limits and work practice standards:

<table>
<thead>
<tr>
<th>If your boiler or process heater is in this subcategory . . .</th>
<th>For the following pollutants . . .</th>
<th>You must meet the following emission limits and work practice standards . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. New or reconstructed limited use solid fuel . . .</td>
<td>a. Particulate Matter (or Total Selected Metals).</td>
<td>0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.02 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>c. Mercury</td>
<td>0.000003 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>d. Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis corrected to 7 percent oxygen (3-run average).</td>
</tr>
<tr>
<td>3. New or reconstructed small solid fuel . . .</td>
<td>a. Particulate Matter (or Total Selected Metals).</td>
<td>0.025 lb per MMBtu of heat input; or (0.0003 lb per MMBtu of heat input).</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.02 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>c. Mercury</td>
<td>0.000003 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td>4. New reconstructed large liquid fuel . . .</td>
<td>a. Particulate Matter</td>
<td>0.03 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.0005 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>c. Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average).</td>
</tr>
<tr>
<td>5. New or reconstructed limited use liquid fuel . . .</td>
<td>a. Particulate Matter</td>
<td>0.03 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.0009 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>c. Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis liquid corrected to 3 percent oxygen (30-day average).</td>
</tr>
<tr>
<td>6. New or reconstructed small liquid fuel . . .</td>
<td>a. Particulate Matter</td>
<td>0.03 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.0009 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td>7. New reconstructed large gaseous fuel . . .</td>
<td>Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average).</td>
</tr>
<tr>
<td>8. New or reconstructed limited use gaseous fuel . . .</td>
<td>Carbon Monoxide</td>
<td>400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average).</td>
</tr>
<tr>
<td>9. Existing large solid fuel . . .</td>
<td>a. Particulate Matter (or Total Selected Metals)</td>
<td>0.07 lb per MMBtu of heat input; or (0.001 lb per MMBtu of heat input).</td>
</tr>
<tr>
<td></td>
<td>b. Hydrogen Chloride</td>
<td>0.09 lb per MMBtu of heat input.</td>
</tr>
<tr>
<td>10. Existing limited use solid fuel . . .</td>
<td>Particulate Matter (or Total Selected Metals)</td>
<td>0.21 lb per MMBtu of heat input; or (0.004 lb per MMBtu of heat input).</td>
</tr>
</tbody>
</table>

TABLE 2 TO SUBPART DDDDD OF PART 63.—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH PARTICULATE MATTER EMISSION LIMITS
As stated in §63.7500, you must comply with the applicable operating limits:

<table>
<thead>
<tr>
<th>If you demonstrate compliance with applicable particulate matter emission limits using . . .</th>
<th>You must meet these operating limits . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wet scrubber control . . .</td>
<td>a. Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.</td>
</tr>
<tr>
<td>2. Fabric filter control . . .</td>
<td>a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period; or</td>
</tr>
<tr>
<td></td>
<td>b. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent.</td>
</tr>
<tr>
<td>3. Electrostatic precipitator control . . .</td>
<td>a. This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or</td>
</tr>
<tr>
<td></td>
<td>b. Other option is for boilers and process heaters that operate wet control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).</td>
</tr>
</tbody>
</table>
### TABLE 2 TO SUBPART DDDDD OF PART 63.—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH PARTICULATE MATTER EMISSION LIMITS—Continued

As stated in §63.7500, you must comply with the applicable operating limits:

<table>
<thead>
<tr>
<th>If you demonstrate compliance with applicable particulate matter emission limits using . . .</th>
<th>You must meet these operating limits . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for particulate matter.</td>
<td></td>
</tr>
<tr>
<td>4. Any other control type .................................................................</td>
<td>This option is for boilers and process heaters that operate dry control systems. Existing boilers and process heaters must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New boilers and process heaters must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).</td>
</tr>
</tbody>
</table>

### TABLE 3 TO SUBPART DDDDD OF PART 63.—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH MERCURY EMISSION LIMITS AND BOILERS AND PROCESS HEATERS THAT CHOOSE TO COMPLY WITH THE ALTERNATIVE TOTAL SELECTED METALS EMISSION LIMITS

As stated in §63.7500, you must comply with the applicable operating limits:

<table>
<thead>
<tr>
<th>If you demonstrate compliance with applicable mercury and/or total selected metals emission limits using . . .</th>
<th>You must meet these operating limits . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wet scrubber control .................................................................</td>
<td>Maintain the minimum pressure drop and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limits for mercury and/or total selected metals.</td>
</tr>
<tr>
<td>2. Fabric filter control .................................................................</td>
<td>a. Install and operate a bag leak detection system according to §63.7525 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during a 6-month period; or</td>
</tr>
<tr>
<td>3. Electrostatic precipitator control ................................................</td>
<td>a. This option is for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average); or</td>
</tr>
<tr>
<td>4. Dry scrubber or carbon injection control ......................................</td>
<td>b. This option is only for boilers and process heaters that operate additional wet control systems. Maintain the minimum voltage and secondary current or total power input of the electrostatic precipitator at or above the operating limits established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for mercury.</td>
</tr>
<tr>
<td>5. Any other control type ...............................................................</td>
<td>This option is only for boilers and process heaters that operate dry control systems. Existing sources must maintain opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent. New sources must maintain opacity to less than or equal to 10 percent opacity (1-hour block average).</td>
</tr>
<tr>
<td>6. Fuel analysis ...............................................................................</td>
<td>Maintain the fuel type or fuel mixture such that the mercury and/or total selected metals emission rates calculated according to §63.7530(d)(4) and/or (5) is less than the applicable emission limits for mercury and/or total selected metals.</td>
</tr>
</tbody>
</table>
### TABLE 4 TO SUBPART DDDDD OF PART 63.—OPERATING LIMITS FOR BOILERS AND PROCESS HEATERS WITH HYDROGEN CHLORIDE EMISSION LIMITS

As stated in §63.7500, you must comply with the following applicable operating limits:

<table>
<thead>
<tr>
<th>If you demonstrate compliance with applicable hydrogen chloride emission limits using . . .</th>
<th>You must meet these operating limits . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Wet scrubber control</td>
<td>Maintain the minimum scrubber effluent pH, pressure drop, and liquid flow-rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.</td>
</tr>
<tr>
<td>2. Dry scrubber control</td>
<td>Maintain the minimum sorbent injection rate at or above the operating levels established during the performance test according to §63.7530(c) and Table 7 to this subpart that demonstrated compliance with the applicable emission limit for hydrogen chloride.</td>
</tr>
<tr>
<td>3. Fuel analysis</td>
<td>Maintain the fuel type or fuel mixture such that the hydrogen chloride emission rate calculated according to §63.7530(d)(3) is less than the applicable emission limit for hydrogen chloride.</td>
</tr>
</tbody>
</table>

### TABLE 5 TO SUBPART DDDDD OF PART 63.—PERFORMANCE TESTING REQUIREMENTS

As stated in §63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>To conduct a performance test for the following pollutant . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Particulate Matter</td>
<td>a. Select sampling ports location and the number of traverse points.</td>
<td>Method 1 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>b. Determine velocity and volumetric flow-rate of the stack gas.</td>
<td>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</td>
<td>Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).</td>
</tr>
<tr>
<td></td>
<td>d. Measure the moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>e. Measure the particulate matter emission concentration.</td>
<td>Method 5 or 17 (positive pressure fabric filters must use Method 5D) in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>f. Convert emissions concentration to lb per MMBtu emission rates.</td>
<td>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td>2. Total selected metals</td>
<td>a. Select sampling ports location and the number of traverse points.</td>
<td>Method 1 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>b. Determine velocity and volumetric flow-rate of the stack gas.</td>
<td>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</td>
<td>Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).</td>
</tr>
<tr>
<td></td>
<td>d. Measure the moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>e. Measure the total selected metals emission concentration.</td>
<td>Method 29 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>f. Convert emissions concentration to lb per MMBtu emission rates.</td>
<td>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td>3. Hydrogen chloride</td>
<td>a. Select sampling ports location and the number of traverse points.</td>
<td>Method 1 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>b. Determine velocity and volumetric flow-rate of the stack gas.</td>
<td>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</td>
<td>Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §63.14(i)).</td>
</tr>
<tr>
<td></td>
<td>d. Measure the moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>e. Measure the hydrogen chloride emission concentration.</td>
<td>Method 26 or 26A in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>f. Convert emissions concentration to lb per MMBtu emission rates.</td>
<td>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td>4. Mercury</td>
<td>a. Select sampling ports location and the number of traverse points.</td>
<td>Method 1 in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>b. Determine velocity and volumetric flow-rate of the stack gas.</td>
<td>Method 2, 2F, or 2G in appendix A to part 60 of this chapter.</td>
</tr>
<tr>
<td></td>
<td>c. Determine oxygen and carbon dioxide concentrations of the stack gas.</td>
<td>Method 3A or 3B in appendix A to part 60 of this chapter, or ASME PTC 19, Part 10 (1981) (IBR, see §62.14(i)).</td>
</tr>
</tbody>
</table>
TABLE 5 TO SUBPART DDDDD OF PART 63.—PERFORMANCE TESTING REQUIREMENTS—Continued

As stated in §63.7520, you must comply with the following requirements for performance test for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>To conduct a performance test for the following pollutant . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Measure the moisture content of the stack gas.</td>
<td>Method 4 in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
<tr>
<td>e. Measure the mercury emission concentration.</td>
<td>Method 29 in appendix A to part 60 of this chapter or Method 101A in appendix B to part 61 of this chapter or ASTM Method D6784–02 (IBR, see §63.14(b)).</td>
<td></td>
</tr>
<tr>
<td>f. Convert emissions concentration to lb per MMBtu emission rates.</td>
<td>Method 19 F-factor methodology in appendix A to part 60 of this chapter.</td>
<td></td>
</tr>
</tbody>
</table>

5. Carbon Monoxide ...........................................

a. Select the sampling ports location and the number of traverse points.

b. Determine oxygen and carbon dioxide concentrations of the stack gas.

c. Measure the moisture content of the stack gas.

d. Measure the carbon monoxide emission concentration.

Method 10, 10A, or 10B in appendix A to part 60 of this chapter, or ASTM D6522–00 (IBR, see §63.14(b)) when the fuel is natural gas.

TABLE 6 TO SUBPART DDDDD OF PART 63.—FUEL ANALYSIS REQUIREMENTS

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>To conduct a fuel analysis for the following pollutant . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mercury ..................................................................</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Collect fuel samples ...........................................</td>
<td>Procedure in §63.7521(c) or ASTM D2234–00+1 (for coal)(IBR, see §63.14(b)) or ASTM D6323–98 (2003)(for biomass)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>b. Composite fuel samples .........................................</td>
<td>Procedure in §63.7521(d) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>c. Prepare composited fuel samples .............................</td>
<td>SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–01 (for coal) (IBR, see §63.14(b)) or ASTM D5198–92 (2003) (for biomass)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>d. Determine heat content of the fuel type .....................</td>
<td>ASTM D5865–03a (for coal)(IBR, see §63.14(b)) or ASTM E711–87 (1996)(for biomass)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>e. Determine moisture content of the fuel type ...............</td>
<td>ASTM D3173–02 (IBR, see §63.14(b)) or ASTM E871–82 (1998)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
<tr>
<td>f. Measure mercury concentration in fuel sample. ............</td>
<td>ASTM D3684–01 (for coal)(IBR, see §63.14(b)) or SW–846–7471A (for solid samples) or SW–846 7470A (for liquid samples).</td>
<td></td>
</tr>
<tr>
<td>g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.</td>
<td>Procedure in §63.7521(c) or ASTM D2234–00+1 (for coal)(IBR, see §63.14(b)) or ASTM D6323–98 (2003)(for biomass)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
</tbody>
</table>

2. Total selected metals ............................................

a. Collect fuel samples ........................................... | Procedure in §63.7521(d) or equivalent. |
| b. Composite fuel samples ......................................... | SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–01 (for coal) (IBR, see §63.14(b)) or ASTM D5198–92 (2003)(for biomass)(IBR, see §63.14(b)) or equivalent. |
| c. Prepare composited fuel samples ............................. | ASTM D5865–03a (for coal)(IBR, see §63.14(b)) or ASTM E711–87 (1996)(for biomass)(IBR, see §63.14(b)) or equivalent. |
| d. Determine heat content of the fuel type ..................... | ASTM D3173–02 (IBR, see §63.14(b)) or ASTM E871 (IBR, see §63.14(b)) or equivalent. |
| e. Determine moisture content of the fuel type ............... | Procedure in §63.7521(d) or equivalent. |
### TABLE 6 TO SUBPART DDDDD OF PART 63—FUEL ANALYSIS REQUIREMENTS—Continued

As stated in §63.7521, you must comply with the following requirements for fuel analysis testing for existing, new or reconstructed affected sources:

<table>
<thead>
<tr>
<th>To conduct a fuel analysis for the following pollutant . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>f. Measure total selected metals concentration in fuel sample.</td>
<td>SW–846–6010B or ASTM D3683–94 (2000) (for coal) (IBR, see §63.14(b)) or ASTM E885–86 (1996) (for biomass)(IBR, see §63.14(b)).</td>
<td></td>
</tr>
<tr>
<td>g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content.</td>
<td>Procedure in §63.7521(c) or ASTM D2234–1 (for coal)(IBR, see §63.14(b)) or ASTM D6323–98 (2003) (for biomass)(IBR, see §63.14(b)) or equivalent.</td>
<td></td>
</tr>
</tbody>
</table>

#### 3. Hydrogen chloride

| a. Collect fuel samples | Procedure in §63.7521(d) or equivalent. |
| b. Composite fuel samples | SW–846–3050B (for solid samples) or SW–846–3020A (for liquid samples) or ASTM D2013–01 (for coal)(IBR, see §63.14(b)) or ASTM D5198–92 (2003) (for biomass)(IBR, see §63.14(b)) or equivalent. |
| c. Prepare composited fuel samples | ASTM D5665–03a (for coal)(IBR, see §63.14(b)) or ASTM E711–87 (1996) (for biomass)(IBR, see §63.14(b)) or equivalent. |
| d. Determine heat content of the fuel type | ASTM D3173–02 (IBR, see §63.14(b)) or ASTM E871–82 (1998)(IBR, see §63.14(b)) or equivalent. |
| e. Determine moisture content of the fuel type | SW–846–9250 or ASTM E776–87 (1996) (for biomass)(IBR, see §63.14(b)) or equivalent. |
| f. Measure chlorine concentration in fuel sample. | | |
| g. Convert concentrations into units of pounds of pollutant per MMBtu of heat content. | | |

### TABLE 7 TO SUBPART DDDDD OF PART 63—ESTABLISHING OPERATING LIMITS

As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

<table>
<thead>
<tr>
<th>If you have an applicable emission limit for . . .</th>
<th>And your operating limits are based on . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Particulate matter, mercury, or total selected metals.</td>
<td>a. Wet scrubber operating parameters.</td>
<td>i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c).</td>
<td>(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test.</td>
<td>(a) You must collect pressure drop and liquid flow rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average pressure drop and liquid flow rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.</td>
</tr>
<tr>
<td></td>
<td>b. Electrostatic precipitator operating parameters (option only for units with additional wet scrubber control).</td>
<td>i. Establish a site-specific minimum voltage and secondary current or total power input according to §63.7530(c).</td>
<td>(1) Data from the pressure drop and liquid flow rate monitors and the particulate matter, mercury, or total selected metals performance test.</td>
<td>(a) You must collect voltage and secondary current or total power input data every 15 minutes during the entire period of the performance tests; (b) Determine the average voltage and secondary current or total power input for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.</td>
</tr>
</tbody>
</table>
TABLE 7 TO SUBPART DDDDD OF PART 63.—ESTABLISHING OPERATING LIMITS—Continued
As stated in §63.7520, you must comply with the following requirements for establishing operating limits:

<table>
<thead>
<tr>
<th>If you have an applicable emission limit for . . .</th>
<th>And your operating limits are based on . . .</th>
<th>You must . . .</th>
<th>Using . . .</th>
<th>According to the following requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Hydrogen Chloride . . .</td>
<td>a. Wet scrubber operating parameters.</td>
<td>i. Establish a site-specific minimum pressure drop and minimum flow rate operating limit according to §63.7530(c).</td>
<td>(1) Data from the pH, pressure drop, and liquid flow-rate monitors and the hydrogen chloride performance test.</td>
<td>(a) You must collect pH, pressure drop, and liquid flow-rate data every 15 minutes during the entire period of the performance tests; (b) Determine the average pH, pressure drop, and liquid flow-rate for each individual test run in the three-run performance test by computing the average of all the 15-minute readings taken during each test run.</td>
</tr>
<tr>
<td></td>
<td>b. Dry scrubber operating parameters.</td>
<td>i. Establish a site-specific minimum sorbent injection rate operating limit according to §63.7530(c).</td>
<td>(1) Data from the sorbent injection rate monitors and hydrogen chloride performance test.</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 8 TO SUBPART DDDDD OF PART 63.—DEMONSTRATING CONTINUOUS COMPLIANCE
As stated in §63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

<table>
<thead>
<tr>
<th>If you must meet the following operating limits or work practice standards . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Opacity ..................................................................................................</td>
<td>a. Collecting the opacity monitoring system data according to §§63.7525(b) and 63.7535; and b. Reducing the opacity monitoring data to 6-minute averages; and c. Maintaining opacity to less than or equal to 20 percent (6-minute average) except for one 6-minute period per hour of not more than 27 percent for existing sources; or maintaining opacity to less than or equal to 10 percent (1-hour block average) for new sources.</td>
</tr>
<tr>
<td>2. Fabric Filter Bag Leak Detection Operation .........................................</td>
<td>Installing and operating a bag leak detection system according to §63.7525 and operating the fabric filter such that the requirements in §63.7540(a)(9) are met.</td>
</tr>
<tr>
<td>3. Wet Scrubber Pressure Drop and Liquid Flow-rate .............................</td>
<td>a. Collecting the pressure drop and liquid flow-rate monitoring system data according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average pressure drop and liquid flow-rate at or above the operating limits established during the performance test according to §63.7530(c).</td>
</tr>
<tr>
<td>4. Wet Scrubber pH ..................................................................................</td>
<td>a. Collecting the pH monitoring system data according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average pH at or above the operating limit established during the performance test according to §63.7530(c).</td>
</tr>
<tr>
<td>5. Dry Scrubber Sorbent or Carbon Injection Rate ..................................</td>
<td>a. Collecting the sorbent or carbon injection rate monitoring system data for the dry scrubber according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and c. Maintaining the 3-hour average sorbent or carbon injection rate at or above the operating limit established during the performance test according to §§63.7530(c).</td>
</tr>
<tr>
<td>6. Electrostatic Precipitator Secondary Current and Voltage or Total Power Input.</td>
<td>a. Collecting the secondary current and voltage or total power input monitoring system data for the electrostatic precipitator according to §§63.7525 and 63.7535; and b. Reducing the data to 3-hour block averages; and</td>
</tr>
</tbody>
</table>
### TABLE 8 TO SUBPART DDDDD OF PART 63.—DEMONSTRATING CONTINUOUS COMPLIANCE—Continued

As stated in §63.7540, you must show continuous compliance with the emission limitations for affected sources according to the following:

<table>
<thead>
<tr>
<th>If you must meet the following operating limits or work practice standards . . .</th>
<th>You must demonstrate continuous compliance by . . .</th>
</tr>
</thead>
</table>
| c. Maintaining the 3-hour average secondary current and voltage or total power input at or above the operating limits established during the performance test according to §§63.7530(c). | a. Only burning the fuel types and fuel mixtures used to demonstrate compliance with the applicable emission limit according to §63.7530(c) or (d) as applicable; and  
  b. Keeping monthly records of fuel use according to §63.7540(a). |

7. Fuel Pollutant Content ..............................................................

### TABLE 9 TO SUBPART DDDDD OF PART 63.—REPORTING REQUIREMENTS

As stated in §63.7550, you must comply with the following requirements for reports:

<table>
<thead>
<tr>
<th>You must submit a(n)</th>
<th>The report must contain . . .</th>
<th>You must submit the report . . .</th>
</tr>
</thead>
</table>
| 1. Compliance report ............................................................ | a. Information required in §63.7550(c)(1) through (11); and  
  b. If there are no deviations from any emission limitation (emission limit and operating limit) that applies to you and there are no deviations from the requirements for work practice standards in Table 8 to this subpart that apply to you, a statement that there were no deviations from the emission limitations and work practice standards during the reporting period. If there were no periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CMSs were out-of-control during the reporting period; and  
  c. If you have a deviation from any emission limitation (emission limit and operating limit) or work practice standard during the reporting period, the report must contain the information in §63.7550(d). If there were periods during which the CMSs, including continuous emissions monitoring system, continuous opacity monitoring system, and operating parameter monitoring systems, were out-of-control, as specified in §63.8(c)(7), the report must contain the information in §63.7550(e); and  
  d. If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i)  
  i. By fax or telephone within 2 working days after starting actions inconsistent with the plan; and  
 b. The information in §63.10(d)(5)(ii)  
 ii. By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. | Semiannually according to the requirements in §63.7550(b). |

2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard.
### TABLE 10 TO SUBPART DDDDD OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART DDDDD

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.1</td>
<td>Applicability</td>
<td>Initial Applicability Determination; Applicability After Standard Established; Permit Requirements; Extensions, Notifications.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.2</td>
<td>Definitions</td>
<td>Definitions for part 63 standards</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.3</td>
<td>Units and Abbreviations</td>
<td>Units and abbreviations for part 63 standards.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.4</td>
<td>Prohibited Activities</td>
<td>Prohibited Activities; Compliance date; Circumvention, Severability.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.5</td>
<td>Construction/Reconstruction</td>
<td>Applicability; applications; approvals</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(a)</td>
<td>Applicability</td>
<td>GP apply unless compliance extension; and GP apply to area sources that become major.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(1)–(4)</td>
<td>Compliance Dates for New and Reconstructed sources.</td>
<td>Standards apply at effective date; 3 years after effective date; upon startup; 10 years after construction or reconstruction commences for 112(f).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(5)</td>
<td>Notification</td>
<td>Must notify if commenced construction or reconstruction after proposal.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(6)</td>
<td>[Reserved].</td>
<td>Area sources that become major must comply with major source standards immediately upon becoming major, regardless of whether required to comply when they were an area source.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(b)(7)</td>
<td>Compliance Dates for New and Reconstructed Area Sources That Become Major.</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(1)–(2)</td>
<td>Compliance Dates for Existing Sources</td>
<td>Comply according to date in subpart, which must be no later than 3 years after effective date; and for 112(f) standards, comply within 90 days of effective date unless compliance extension.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(3)–(4)</td>
<td>[Reserved].</td>
<td>Area sources that become major must comply with major source standards by date indicated in subpart or by equivalent time period (for example, 3 years).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(c)(5)</td>
<td>Compliance Dates for Existing Area Sources That Become Major.</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(d)</td>
<td>[Reserved].</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(1)–(2)</td>
<td>Operation &amp; Maintenance</td>
<td>Operate to minimize emissions at all times; and Correct malfunctions as soon as practicable; and Operation and maintenance requirements independently enforceable; information Administrator will use to determine if operation and maintenance requirements were met.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(e)(3)</td>
<td>Startup, Shutdown, and Malfunction Plan (SSMP).</td>
<td>Requirement for SSM and startup, shutdown, malfunction plan; and content of SSMP.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(f)(1)</td>
<td>Compliance Except During SSM</td>
<td>Comply with emission standards at all times except during SSM.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(f)(2)–(3)</td>
<td>Methods for Determining Compliance</td>
<td>Compliance based on performance test, operation and maintenance plans, records, inspection.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(g)(1)–(3)</td>
<td>Alternative Standard</td>
<td>Procedures for getting an alternative standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(1)</td>
<td>Compliance with Opacity/VE Standards</td>
<td>Comply with opacity/VE emission limitations at all times except during SSM. If standard does not state test method, use Method 9 for opacity and Method 22 for VE.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(2)(i)</td>
<td>Determining Compliance with Opacity/Visible Emission (VE) Standards.</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(2)(ii)</td>
<td>[Reserved].</td>
<td>Criteria for when previous opacity/VE testing can be used to show compliance with this subpart.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.6(h)(2)(iii)</td>
<td>Using Previous Tests to Demonstrate Compliance with Opacity/VE Standards</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(h)(3)</td>
<td>[Reserved].</td>
<td>Notify Administrator of anticipated date of observation.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(h)(4)</td>
<td>Notification of Opacity/VE Observation Date.</td>
<td>Dates and Schedule for conducting opacity/VE observations.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.6(h)(5)(i),(iii)–(v)</td>
<td>Conducting Opacity/VE Observations</td>
<td></td>
<td>No.</td>
</tr>
</tbody>
</table>
As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject Brief description</th>
<th>Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>§ 63.6(h)(5)(ii)</td>
<td>Opacity Test Duration and Averaging Times.</td>
<td>Must have at least 3 hours of observation with thirty, 6-minute averages.</td>
</tr>
<tr>
<td>§ 63.6(h)(6)</td>
<td>Records of Conditions During Opacity/VE observations.</td>
<td>Keep records available and allow Administrator to inspect.</td>
</tr>
<tr>
<td>§ 63.6(h)(7)(i)</td>
<td>Report continuous opacity monitoring system Monitoring Data from Performance Test.</td>
<td>Submit continuous opacity monitoring system data with other performance test data.</td>
</tr>
<tr>
<td>§ 63.6(h)(7)(ii)</td>
<td>Using continuous opacity monitoring system instead of Method 9.</td>
<td>Can submit continuous opacity monitoring system data instead of Method 9 results even if subpart requires Method 9, but must notify Administrator before performance test.</td>
</tr>
<tr>
<td>§ 63.6(h)(7)(iii)</td>
<td>Averaging time for continuous opacity monitoring system during performance test.</td>
<td>To determine compliance, must reduce continuous opacity monitoring system data to 6-minute averages.</td>
</tr>
<tr>
<td>§ 63.6(h)(7)(iv)</td>
<td>Continuous opacity monitoring system requirements.</td>
<td>Demonstrate that continuous opacity monitoring system performance evaluations are conducted according to §§63.8(e), continuous opacity monitoring systems are properly maintained and operated according to §63.8(c) and data quality as §63.8(d).</td>
</tr>
<tr>
<td>§ 63.6(h)(7)(v)</td>
<td>Determining Compliance with Opacity/VE Standards.</td>
<td>Continuous opacity monitoring system is probative but not conclusive evidence of compliance with opacity standard, even if Method 9 observation shows otherwise. Requirements for continuous opacity monitoring system to be probative evidence-proper maintenance, meeting PS 1, and data have not been altered.</td>
</tr>
<tr>
<td>§ 63.6(h)(8)</td>
<td>Determining Compliance with Opacity/VE Standards.</td>
<td>Administrator will use all continuous opacity monitoring system, Method 9, and Method 22 results, as well as information about operation and maintenance to determine compliance.</td>
</tr>
<tr>
<td>§ 63.6(h)(9)</td>
<td>Adjusted Opacity Standard</td>
<td>Procedures for Administrator to adjust an opacity standard.</td>
</tr>
<tr>
<td>§ 63.6(i)(1)–(14)</td>
<td>Compliance Extension</td>
<td>Procedures and criteria for Administrator to grant compliance extension.</td>
</tr>
<tr>
<td>§ 63.6(j)</td>
<td>Presidential Compliance Exemption</td>
<td>President may exempt source category from requirement to comply with rule.</td>
</tr>
<tr>
<td>§ 63.7(a)(1)</td>
<td>Performance Test Dates</td>
<td>Dates for Conducting Initial Performance Testing and Other Compliance Demonstrations.</td>
</tr>
<tr>
<td>§ 63.7(a)(2)</td>
<td>Performance Test Dates</td>
<td>New source with initial startup date before effective date has 180 days after effective date to demonstrate compliance.</td>
</tr>
<tr>
<td>§ 63.7(a)(2)(ii–viii)</td>
<td>Performance Test Dates</td>
<td>1. New source that commenced construction between proposal and promulgation dates, when promulgated standard is more stringent than proposed standard, has 180 days after effective date or 180 days after startup of source, whichever is later, to demonstrate compliance; and.</td>
</tr>
<tr>
<td>§ 63.7(a)(2)(x)</td>
<td>Performance Test Dates</td>
<td>2. If source initially demonstrates compliance with less stringent proposed standard, it has 3 years and 180 days after the effective date of the standard or 180 days after startup of source, whichever is later, to demonstrate compliance with promulgated standard.</td>
</tr>
<tr>
<td>§ 63.7(a)(3)</td>
<td>Section 114 Authority</td>
<td>Administrator may require a performance test under CAA Section 114 at any time.</td>
</tr>
</tbody>
</table>
## TABLE 10 TO SUBPART DDDD OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART DDDD—Continued

As stated in §63.7565, you must comply with the applicable General Provisions according to the following:

<table>
<thead>
<tr>
<th>Citation</th>
<th>Subject</th>
<th>Brief description</th>
<th>Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>§63.7(b)(1)</td>
<td>Notification of Performance Test</td>
<td>Must notify Administrator 60 days before the test. If rescheduling a performance test is necessary, must notify Administrator 5 days before scheduled date of rescheduled test.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.7(b)(2)</td>
<td>Notification of Rescheduling</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(c)</td>
<td>Quality Assurance/Test Plan</td>
<td>Requirement to submit site-specific test plan 60 days before the test or on date Administrator agrees with: test plan approval procedures; and performance audit requirements; and internal and external QA procedures for testing.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(d)</td>
<td>Testing Facilities</td>
<td>Requirements for testing facilities</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(1)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>1. Performance tests must be conducted under representative conditions; and 2. Cannot conduct performance tests during SSM; and 3. Not a deviation to exceed standard during SSM; and 4. Upon request of Administrator, make available records necessary to determine conditions of performance tests.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(2)</td>
<td>Conditions for Conducting Performance Tests.</td>
<td>Must conduct according to rule and EPA test methods unless Administrator approves alternative.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(3)</td>
<td>Test Run Duration</td>
<td>Must have three separate test runs; and Compliance is based on arithmetic mean of three runs; and conditions when data from an additional test run can be used.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(e)(4)</td>
<td>Interaction with other sections of the Act</td>
<td>Nothing in §63.7(e)(1) through (4) can abrogate the Administrator’s authority to require testing under Section 114 of the Act.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(f)</td>
<td>Alternative Test Method</td>
<td>Procedures by which Administrator can grant approval to use an alternative test method.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(g)</td>
<td>Performance Test Data Analysis</td>
<td>Must include raw data in performance test report; and must submit performance test data 60 days after end of test with the Notification of Compliance Status; and keep data for 5 years.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.7(h)</td>
<td>Waiver of Tests</td>
<td>Procedures for Administrator to waive performance test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(1)</td>
<td>Applicability of Monitoring Requirements</td>
<td>Subject to all monitoring requirements in standard.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(2)</td>
<td>Performance Specifications</td>
<td>Performance Specifications in appendix B of part 60 apply.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(a)(3)</td>
<td>[Reserved].</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(a)(4)</td>
<td>Monitoring with Flares</td>
<td>Unless your rule says otherwise, the requirements for flares in §63.11 apply.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(b)(1)(i)–(iii)</td>
<td>Monitoring</td>
<td>Must conduct monitoring according to standard unless Administrator approves alternative. Flares not subject to this section unless otherwise specified in relevant standard. Specific requirements for installing monitoring systems; and must install on each effluent before it is combined and before it is released to the atmosphere unless Administrator approves otherwise; and if more than one monitoring system on an emission point, must report all monitoring system results, unless one monitoring system is a backup.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(b)(2)–(3)</td>
<td>Multiple Effluents and Multiple Monitoring Systems.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>§63.8(c)(1)</td>
<td>Monitoring System Operation and Maintenance.</td>
<td>Maintain monitoring system in a manner consistent with good air pollution control practices.</td>
<td>Yes.</td>
</tr>
</tbody>
</table>
TABLE 10 TO SUBPART DDDDD OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART DDDDD—Continued

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</tr>
</thead>
<tbody>
<tr>
<td>§63.8(c)(1)(i)</td>
<td>Routine and Predictable SSM</td>
<td>Maintain and operate CMS according to §63.6(e)(1).</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(1)(ii)</td>
<td>SSM not in SSMP</td>
<td>Must keep necessary parts available for routine repairs of CMSs.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(1)(iii)</td>
<td>Compliance with Operation and Maintenance Requirements.</td>
<td>Must develop and implement an SSMP for CMSs.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(2)–(3)</td>
<td>Monitoring System Installation</td>
<td>Must install to get representative emission and parameter measurements; and must verify operational status before or at performance test.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(4)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>CMSs must be operating except during breakdown, out-of-control, repair, maintenance, and high-level calibration drifts.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(c)(4)(i)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>Continuous opacity monitoring system must have a minimum of one cycle of sampling and analysis for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(4)(ii)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>Continuous emissions monitoring system must have a minimum of one cycle of operation for each successive 15-minute period.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(c)(5)</td>
<td>Continuous Opacity Monitoring system (COMS) Requirements.</td>
<td>Must do daily zero and high level calibrations.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(c)(6)</td>
<td>Continuous Monitoring System (CMS) Requirements.</td>
<td>Must do daily zero and high level calibrations.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(c)(7)–(8)</td>
<td>Continuous Monitoring Systems Requirements.</td>
<td>Out-of-control periods, including reporting</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(d)</td>
<td>Continuous Monitoring Systems Quality Control.</td>
<td>Requirements for continuous monitoring systems quality control, including calibration, etc.; and must keep quality control plan on record for the life of the affected source. Keep old versions for 5 years after revisions.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(e)</td>
<td>Continuous monitoring systems Performance Evaluation.</td>
<td>Notification, performance evaluation test plan, reports.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(f)(1)–(5)</td>
<td>Alternative Monitoring Method</td>
<td>Procedures for Administrator to approve alternative monitoring.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(f)(6)</td>
<td>Alternative to Relative Accuracy Test</td>
<td>Procedures for Administrator to approve alternative relative accuracy tests for continuous emissions monitoring system.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.8(g)(1)–(4)</td>
<td>Data Reduction</td>
<td>Continuous opacity monitoring system 6-minute averages calculated over at least 36 evenly spaced data points; and continuous emissions monitoring system 1-hour averages computed over at least 4 equally spaced data points.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.8(g)(5)</td>
<td>Data Reduction</td>
<td>Data that cannot be used in computing averages for continuous emissions monitoring system and continuous opacity monitoring system.</td>
<td>No.</td>
</tr>
<tr>
<td>§63.9(a)</td>
<td>Notification Requirements</td>
<td>Applicability and State Delegation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(b)(1)–(5)</td>
<td>Initial Notifications</td>
<td>Submit notification 120 days after effective date; and Notification of intent to construct/reconstruct; and Notification of commencement of construct/reconstruct; Notification of startup; and Contents of each.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(c)</td>
<td>Request for Compliance Extension</td>
<td>Can request if cannot comply by date or if installed BACT/LAER.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(d)</td>
<td>Notification of Special Compliance Requirements for New Source.</td>
<td>For sources that commence construction between proposal and promulgation and want to comply 3 years after effective date.</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(e)</td>
<td>Notification of Performance Test</td>
<td>Notify Administrator 60 days prior</td>
<td>No.</td>
</tr>
</tbody>
</table>
TABLE 10 TO SUBPART DDDDD OF PART 63.—APPLICABILITY OF GENERAL PROVISIONS TO SUBPART DDDDD—Continued

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<tbody>
<tr>
<td>§63.9(f)</td>
<td>Notification of VE/Opacity Test</td>
<td>Notify Administrator 30 days prior</td>
<td>No.</td>
</tr>
<tr>
<td>§63.9(g)</td>
<td>Additional Notifications When Using Continuous Monitoring Systems</td>
<td></td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(h)(1)–(6)</td>
<td>Notification of Compliance Status</td>
<td>Contents; and due 60 days after end of performance test or other compliance demonstration, and when to submit to Federal vs. State authority</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(i)</td>
<td>Adjustment of Submittal Deadlines</td>
<td>Procedures for Administrator to approve change in when notifications must be submitted</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.9(j)</td>
<td>Change in Previous Information</td>
<td>Must submit within 15 days after the change</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(a)</td>
<td>Recordkeeping/Reporting</td>
<td>Applies to all, unless compliance extension; and when to submit to Federal vs. State authority; and procedures for owners of more than 1 source</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(1)</td>
<td>Recordkeeping/Reporting</td>
<td>General Requirements; and keep all records readily available and keep for 5 years</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(i)–(v)</td>
<td>Records related to Startup, Shutdown, and Malfunction</td>
<td>Occurrence of each of operation (process, equipment); and occurrence of each malfunction of air pollution equipment; and maintenance of air pollution control equipment; and actions during startup, shutdown, and malfunction</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vi) and (x–xi)</td>
<td>Continuous monitoring systems Records</td>
<td>Malfunctions, inoperative, out-of-control; and calibration checks; and adjustments, maintenance</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(vii)–(ix)</td>
<td>Records</td>
<td>Measurements to demonstrate compliance with emission limitations; and performance test, performance evaluation, and visible emission observation results; and measurements to determine conditions of performance tests and performance evaluations</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xii)</td>
<td>Records</td>
<td>Records when under waiver</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiii)</td>
<td>Records</td>
<td>Records when using alternative to relative accuracy test</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(b)(2)(xiv)</td>
<td>Records</td>
<td>All documentation supporting Initial Notification and Notification of Compliance Status</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(b)(3)</td>
<td>Records</td>
<td>Applicability Determinations</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(c)(1),(5)–(8),(10)–(15)</td>
<td>Records</td>
<td>Additional Records for continuous monitoring systems</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(c)(7)–(8)</td>
<td>Records</td>
<td>Records of excess emissions and parameter monitoring exceedances for continuous monitoring systems</td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(d)(1)</td>
<td>General Reporting Requirements</td>
<td>Requirement to report</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(2)</td>
<td>Report of Performance Test Results</td>
<td>When to submit to Federal or State authority</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(3)</td>
<td>Reporting Opacity or VE Observations</td>
<td>What to report and when</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(4)</td>
<td>Progress Reports</td>
<td>Must submit progress reports on schedule if under compliance extension</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(d)(5)</td>
<td>Startup, Shutdown, and Malfunction Reports</td>
<td>Contents and submission</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(e)(1)(2)</td>
<td>Additional continuous monitoring systems Reports</td>
<td>Must report results for each CEM on a unit; and written copy of performance evaluation; and 3 copies of continuous opacity monitoring system performance evaluation</td>
<td>Yes.</td>
</tr>
<tr>
<td>§63.10(e)(3)</td>
<td>Reports</td>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>§63.10(e)(3)(i–iii)</td>
<td>Reports</td>
<td>Schedule for reporting excess emissions and parameter monitor exceedance (now defined as deviations)</td>
<td>No.</td>
</tr>
</tbody>
</table>
Appendix A to Subpart DDDDD—Methodology and Criteria for Demonstrating Eligibility for the Health-Based Compliance Alternatives Specified for the Large Solid Fuel Subcategory

1. Purpose/Introduction

This appendix provides the methodology and criteria for demonstrating that your affected source is eligible for the compliance alternative for the HCl emission limit and/or the total selected metals (TSM) emission limit. This appendix specifies emissions testing methods that you must use to determine HCl, chlorine, and manganese emissions from the affected units and what parts of the affected source facility must be included in the eligibility demonstration. You must demonstrate that your affected source is eligible for the health-based compliance alternatives using either a look-up table analysis (based on the look-up tables included in this appendix) or a site-specific compliance demonstration performed according to the criteria specified in this appendix. This appendix also specifies how and when you file any eligibility demonstrations for your affected source and how to show that your affected source remains eligible for the health-based compliance alternatives in the future.

2. Who Is Eligible To Demonstrate That They Qualify for the Health-Based Compliance Alternatives?

Each new, reconstructed, or existing affected source may demonstrate that they are eligible for the health-based compliance alternatives. Section 63.7490 of subpart DDDDD defines the affected source and explains which affected sources are new, existing, or reconstructed.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl2 in the eligibility demonstration. If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl2. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl2.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl2 in the eligibility demonstration. If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl2. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl2.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) Periods when emissions tests must be conducted.

(1) You must conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1). You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) Number of test runs. You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) Sampling locations. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) Collection of monitoring data for HAP control devices. During the emissions test, you must collect operating parameter and point monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7(e)(3) of subpart DDDDD.

3. What Parts of My Facility Have To Be Included in the Health-Based Eligibility Demonstration?

If you are attempting to determine your eligibility for the compliance alternative for HCl, you must include every emission point subject to subpart DDDDD that emits either HCl or Cl2 in the eligibility demonstration. If you are attempting to determine your eligibility for the compliance alternative for TSM, you must include every emission point subject to subpart DDDDD that emits manganese in the eligibility demonstration.

4. How Do I Determine HAP Emissions From My Affected Source?

(a) You must conduct HAP emissions tests or fuel analysis for every emission point covered under subpart DDDDD within the affected source facility according to the requirements in paragraphs (b) through (f) of this section and the methods specified in Table 1 of this appendix.

(1) If you are attempting to determine your eligibility for the compliance alternative for HCl, you must test the subpart DDDDD units at your facility for both HCl and Cl2. When conducting fuel analysis, you must assume any chlorine detected will be emitted as Cl2.

(2) If you are attempting to determine your eligibility for the compliance alternative for TSM, you must test the subpart DDDDD units at your facility for manganese.

(b) Periods when emissions tests must be conducted.

(1) You must conduct emissions tests during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1). You must test under worst-case operating conditions as defined in this appendix. You must describe your worst-case operating conditions in your performance test report for the process and control systems (if applicable) and explain why the conditions are worst-case.

(c) Number of test runs. You must conduct three separate test runs for each test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.

(d) Sampling locations. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.

(e) Collection of monitoring data for HAP control devices. During the emissions test, you must collect operating parameter and point monitoring system data at least every 15 minutes during the entire emissions test and establish the site-specific operating requirements in Tables 3 or 4, as appropriate, of subpart DDDDD using data from the monitoring system and the procedures specified in §63.7(e)(3) of subpart DDDDD.
(f) *Nondetect data*. You may treat emissions of an individual HAP as zero if all of the test runs result in a nondetect measurement and the condition in paragraph (f)(1) of this section is met for the manganese test method. Otherwise, nondetect data for individual HAP must be treated as one-half of the method detection limit.

(1) For manganese measured using Method 29 in appendix A to 40 CFR part 60, you analyze samples using atomic absorption spectroscopy (AAS).

(2) Your site-specific compliance demonstration indicates that your maximum HQ for manganese at a location where people live is less than or equal to 1.0.

6. How Do I Conduct a Look-Up Table Analysis?

You may use look-up tables to demonstrate that your facility is eligible for either the compliance alternative for the HCl emission limit or the compliance alternative for TSM emission limit.

(a) **HCl health-based compliance alternative**. (1) To calculate the total toxicity-weighted HCl-equivalent emission rate for your facility, first calculate the total affected source emission rate of HCl by summing the maximum hourly HCl emission rates from all your subpart DDDDD sources. Then, similarly, calculate the total affected source emission rate for Cl₂. Finally, calculate the toxicity-weighted emission rate (expressed in HCl equivalents) according to Equation 2 of this appendix.

(b) **TSM Compliance Alternative**. To calculate the total manganese emission rate for your affected source, sum the maximum hourly manganese emission rates for all your subpart DDDDD sources. The calculated manganese emission rate will then be compared to the allowable emission rate in the Table 3 of this appendix. To determine the correct value from the table, an average value for the appropriate subpart DDDDD emission points should be used for stack height and the minimum distance between any appropriate subpart DDDDD stack at the facility and the property boundary should be used for property boundary distance. Appropriate emission points and stacks are those that emit HCl and/or Cl₂. If one or both of these values does not match the exact values in the lookup tables, then use the next lowest table value. *(Note: If your average stack height is less than 5 meters, you must use the 5 meter row.)* Your facility is eligible to comply with the health-based alternative HCl emission limit if your toxicity-weighted HCl equivalent emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value in Table 2 of this appendix.

7. How Do I Conduct a Site-Specific Compliance Demonstration?

If you fail to demonstrate that your facility is able to comply with one or both of the alternative health-based emission standards using the look-up table approach, you may choose to perform a site-specific compliance demonstration for your facility. You may use any scientifically-accepted peer-reviewed risk assessment methodology for your site-specific compliance demonstration. An example of one approach for performing a site-specific compliance demonstration for air toxics can be found in the EPA’s “Air Toxics Risk Assessment Reference Library, Volume 2, Site-Specific Risk Assessment Technical Resource Document”, which may be obtained through the EPA’s Air Toxics Web site at [http://www.epa.gov/ttn/atw/](http://www.epa.gov/ttn/atw/). *(Note: If your average stack height is less than 5 meters, you must use the 5 meter row.)* Your facility is eligible to comply with the TSM emission limit if your manganese emission rate, determined using the methods specified in this appendix, does not exceed the appropriate value specified in Table 3 of this appendix.

(a) Your facility is eligible for the HCl alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for HCl and Cl₂ from your subpart DDDDD sources is less than or equal to 1.0.

(b) Your facility is eligible for the TSM alternative compliance option if your site-specific compliance demonstration shows that the maximum HQ for manganese from your subpart DDDDD sources is less than or equal to 1.0.

(c) At a minimum, your site-specific compliance demonstration must:

(1) Estimate long-term inhalation exposures through the estimation of annual

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\[ \text{Max Hourly Emissions} = \sum_{i=1}^{n} (\text{Er} \times \text{Hm}) \quad (\text{Eq. 1}) \]

Where:

- \( \text{Max Hourly Emissions} \) = Maximum hourly emissions for hydrogen chloride, chlorine, or manganese, in units of pounds per hour.
- \( \text{Er} \) = Emission rate (the 3-run average as determined according to Table 1 of this appendix or the pollutant concentration in the fuel samples analyzed according to §63.75221) for hydrogen chloride, chlorine, or manganese, in units of pounds per million Btu of heat input.
- \( \text{Hm} \) = Maximum rated heat input capacity of appropriate emission point, in units of million Btu per hour.

\[ \text{ER}_{tw} = \sum (\text{ER}_i \times \left( \frac{\text{RfC}_{\text{HCl}}}{\text{RfC}_{\text{Cl}_2}} \right)) \quad (\text{Eq. 2}) \]

Where:

- \( \text{ER}_{tw} \) = the HCl-equivalent emission rate, lb/hr.
- \( \text{ER}_i \) = emission rate of HAP \( i \) in lbs/hr
- \( \text{RfC}_{\text{HCl}} \) = the reference concentration of HAP \( i \) in lbs/hr
- \( \text{RfC}_{\text{Cl}_2} \) = the reference concentration of HCl (RfCs for HCl and Cl₂ can be found at [http://www.epa.gov/ttn/atw/toxsource/summary.html](http://www.epa.gov/ttn/atw/toxsource/summary.html)).
or multi-year average ambient concentrations;
(2) Estimate the inhalation exposure for the individual most exposed to the facility’s emissions;
(3) Use site-specific, quality-assured data wherever possible;
(4) Use health-protective default assumptions wherever site-specific data are not available, and;
(5) Contain adequate documentation of the data and methods used for the assessment so that it is transparent and can be reproduced by an experienced risk assessor and emissions measurement expert.

d) Your site-specific compliance demonstration need not:
(1) Assume any attenuation of exposure concentrations due to the penetration of outdoor pollutants into indoor exposure areas;
(2) Assume any reaction or deposition of the emitted pollutants during transport from the emission point to the point of exposure.

8. What Must My Health-Based Eligibility Demonstration Contain?
(a) Your health-based eligibility demonstration must contain, at a minimum, the information specified in paragraphs (a)(1) through (6) of this section.
(1) Identification of each appropriate emission point at the affected source facility, including the maximum rated capacity of each appropriate emission point.
(2) Stack parameters for each appropriate emission point including, but not limited to, the parameters listed in paragraphs (a)(2)(i) through (iv) below:
(i) Emission release type.
(ii) Stack height, stack area, stack gas temperature, and stack gas exit velocity.
(iii) Plot plan showing all emission points, nearby residences, and fenceline.
(iv) Identification of any control devices used to reduce emissions from each appropriate emission point.
(3) Emission test reports for each pollutant and appropriate emission point which has been tested using the test methods specified in Table 1 of this appendix, including a description of the process parameters identified as being worst case. Fuel analyses for each fuel and emission point which has been conducted including collection and analytical methods used.
(4) Identification of the RfC values used in your look-up table analysis or site-specific compliance demonstration.
(5) Calculations used to determine the HCl-equivalent or manganese emission rates according to sections 6(a) or (b) of this appendix.
(6) Identification of the controlling process factors (including, but not limited to, fuel type, heat input rate, type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) that will become Federally enforceable permit conditions used to show that your facility remains eligible for the health-based compliance alternatives.
(b) If you use the look-up table analysis in section 6 of this appendix to demonstrate that your facility is eligible for either health-based compliance alternative, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (b)(1) through (3) of this section.
(1) Calculations used to determine the average stack height of the subpart DDDD emission points that emit either manganese or HCl and Cl₂.
(2) Identification of the subpart DDDD emission point, that emits either manganese or HCl and Cl₂, with the minimum distance to the property boundary of the facility.
(3) Comparison of the values in the look-up tables (Tables 2 and 3 of this appendix) to your maximum HCl-equivalent or manganese emission rates.
(c) If you use a site-specific compliance demonstration as described in section 7 of this appendix to demonstrate that your facility is eligible, your eligibility demonstration must contain, at a minimum, the information in paragraphs (a) and (c)(1) through (7) of this section:
(1) Identification of the risk assessment methodology used.
(2) Documentation of the fate and transport model used.
(3) Documentation of the fate and transport model inputs, including the information described in paragraphs (a)(1) through (5) of this section converted to the dimensions required for the model and all of the following that apply: meteorological data; building, land use, and terrain data; receptor locations and population data; and other facility-specific parameters input into the model.
(4) Documentation of the fate and transport model output.
(5) Documentation of any exposure assessment and risk characterization calculations.
(6) Comparison of the HQ HI to the limit of 1.0.

9. When Do I Have to Complete and Submit My Health-Based Eligibility Demonstration?
(a) If you have an existing affected source, you must complete and submit your eligibility demonstration to your permitting authority, along with a signed certification that the demonstration is an accurate depiction of your facility, no later than the date one year prior to the compliance date of subpart DDDD. A separate copy of the eligibility demonstration must be submitted to: U.S. EPA, Risk and Exposure Assessment Group, Emission Standards Division (C404–01), Attn: Group Leader, Research Triangle Park, North Carolina 27711, electronic mail address REAG@epa.gov.
(b) If you have a new or reconstructed affected source that starts up after the effective date of subpart DDDD, or an affected source that is an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP after the effective date for subpart DDDD, then you must follow the schedule in paragraphs (c)(1) and (2) of this section.
(1) You must complete and submit a preliminary eligibility demonstration based on the information (e.g., equipment types, estimated emission rates, etc.) used to obtain your title V permit. You must base your preliminary eligibility demonstration on the maximum emissions allowed under your title V permit. If the preliminary eligibility demonstration indicates that your affected source facility is eligible for either compliance alternative, then you may start up your new affected source and your new affected source will be considered in compliance with the alternative HCl standard and subject to the compliance requirements in this appendix or, in the case of manganese, your compliance demonstration with the TSM emission limit is based on 7 metals (excluding manganese).
(2) You must conduct the emissions tests or fuel analysis specified in section 4 of this appendix upon initial startup and use the results of these emissions tests to complete and submit your eligibility demonstration within 180 days following your initial startup date. To be eligible, you must meet the criteria in section 11 of this appendix within 18 months following initial startup of your affected source.

10. When Do I Become Eligible for the Health-Based Compliance Alternatives?
To be eligible for either health-based compliance alternative, you must identify the parameters that defined your affected source as eligible for the health-based compliance alternatives (including, but not limited to, fuel type, fuel mix (annual average), type of control devices, process parameters reflecting the emissions rates used for your eligibility demonstration) must be submitted for incorporation as Federally enforceable limits into your title V permit. If you do not meet these criteria, then your affected source is subject to the applicable emission limits, operating limits, and work practice standards in Subpart DDDD.

11. How Do I Ensure That My Facility Remains Eligible for the Health-Based Compliance Alternatives?
(a) You must update your eligibility demonstration and resubmit it each time you have a process change, such that any of the parameters that defined your affected source changes in a way that could result in increased HAP emissions (including, but not limited to, fuel type, fuel mix (annual average), change in type of control device, changes in process parameters documented as worst-case conditions during the emissions testing used for your approved eligibility demonstration).
(b) If you are updating your eligibility demonstration to account for a change in the parameters described in paragraph (a) of this section, then you must perform emission testing or fuel analysis according to section 4 of this appendix for the subpart DDDD emission points that may have increased HAP emissions beyond the levels reflected in your previously approved eligibility demonstration due to the process changes.
change. You must submit your revised eligibility demonstration to the permitting authority prior to revising your permit to incorporate the process change. If your updated eligibility demonstration indicates that your affected source is no longer eligible for the health-based compliance alternatives, then you must comply with the applicable emission limits, operating limits, and compliance requirements in Subpart DDDDD prior to making the process change and revising your permit.

12. What Records Must I Keep?
You must keep records of the information used in developing the eligibility demonstration for your affected source, including all of the information specified in section 8 of this appendix.

13. Definitions
The definitions in §63.7575 of subpart DDDDD apply to this appendix. Additional definitions applicable for this appendix are as follows:

- **Hazard Index (HI)** means the sum of more than one hazard quotient for multiple substances and/or multiple exposure pathways.

- **Hazard Quotient (HQ)** means the ratio of the predicted media concentration of a pollutant to the media concentration at which no adverse effects are expected. For inhalation exposures, the HQ is calculated as the air concentration divided by the RfC.

- **Look-up table analysis** means a risk screening analysis based on comparing the HAP or HAP-equivalent emission rate from the affected source to the appropriate maximum allowable HAP or HAP-equivalent emission rates specified in Tables 2 and 3 of this appendix.

- **Reference Concentration (RfC)** means an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. It can be derived from various types of human or animal data, with uncertainty factors generally applied to reflect limitations of the data used.

- **Worst-case operating conditions** means operation of an affected unit during emissions testing under the conditions that result in the highest HAP emissions or that result in the emissions stream composition (including HAP and non-HAP) that is most challenging for the control device if a control device is used. For example, worst-case conditions could include operation of an affected unit firing solid fuel likely to produce the most HAP.

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Appendix E: Control Technology Plan from Consent Decree
Control Technology Plan
For Clinton, IA
Wet Corn Mill

March 14, 2003
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<tr>
<td>1.0 Introduction</td>
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<td>2.0 Process Flow Diagram</td>
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<td>3.0 Emission Units Requiring Pollution Control Equipment or Optimization of Existing Control Equipment</td>
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<td>4.0 Engineering Design Criteria for Pollution Control Equipment</td>
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<td>5.0 Monitoring Parameters for Pollution Control Equipment</td>
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<td>6.0 Continuous Emission Monitors</td>
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<td>9.0 Pollution Control Equipment Performance Test Schedule and Test Methods</td>
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<td>10.0 Procedures for Optimization of Control Equipment and Setting Emission Limits</td>
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1.0 INTRODUCTION

This Control Technology Plan (CTP) contains:

a) Identification of all units to be controlled and/or optimized;
b) Engineering design criteria for all proposed controls capable of meeting the emission levels required by Section IV of this Consent Decree;
c) Monitoring parameters for all control equipment;
d) Emission limits and required reductions for each pollutant as appropriate;
e) A schedule for installation;
f) Identification of all units to be emission tested under the Consent Decree and definition of the test methods that will be used;
g) A procedure for establishing emission limits following start-up of emissions control equipment.
2.0 Process Flow Diagram

The following flow diagram presents the affected emission units and associated control technology.

Notes:
1. Dashed line shapes indicate control equipment installation/optimization or shutdown required by the consent decree.
2. Process flow diagram intended to illustrate process units, which will have additional control added.
3. Process flow does not indicate all processes or products at this facility.
### 3.0 Emission Units Requiring Pollution Control Equipment or Optimization of Existing Control Equipment

The following emission units and control equipment have been designated as affected units in the Consent Decree and have emission limits requiring pollution control technology or alternative projects designed to reduce emissions. Changes to the requirements listed in the following table shall be considered non-material modifications under Paragraph 5 of the Consent Decree, provided ADM obtains written approval of the change(s) from USEPA and Iowa DNR. Changes in the requirements in the following table shall be accompanied by changes to the requirements in Sections 4, 5, 6, 9, and 10 of this CTP, as appropriate.

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<td>17, 19, 20 &amp; 58-1</td>
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<td>EU-YRD-2</td>
<td>Non-dedicated Ethanol Loadout</td>
<td>CE-XX</td>
<td>Flare (VOC)</td>
</tr>
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<td>EU-78-8, 9, &amp; 10</td>
<td>Stillage MR Vents</td>
<td>CE-XX</td>
<td>Scrubber (VOC)</td>
</tr>
<tr>
<td>EU-14-66a-e</td>
<td>Vetter Dryers 1-5</td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
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<td>EU-14-4a-d</td>
<td>Leader Dryers 1-4</td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
</tr>
<tr>
<td>EU-25-72A</td>
<td>Carbon Furnace 3</td>
<td>CE-25-72A</td>
<td>Optimization of Scrubber (SO2)</td>
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<tr>
<td>EU-16a-r</td>
<td>Millhouse Scrubber</td>
<td>CE-7-16</td>
<td>Optimization of Scrubber (VOC)</td>
</tr>
<tr>
<td>EU-YRD-1, YRD-4A, &amp; YRD-5A</td>
<td>Stoker Boilers No. 3-5</td>
<td>N/A</td>
<td>Achieve Lowered Emission Limitation (SO2)</td>
</tr>
</tbody>
</table>

Clinton Control Technology Plan

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<table>
<thead>
<tr>
<th>Emission Unit #</th>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
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<tr>
<td>EU-YRD-6c</td>
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<td>Achieve Lowered Emission Limitation (SO2)</td>
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<td>CE-XX</td>
<td>SNCR or equivalent reductions (1) (NOx)</td>
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<tr>
<td>EU-YRD-7d</td>
<td>Cyclone Boiler No. 7</td>
<td>CE-XX</td>
<td>Achieve Lowered Emission Limitation (SO2)</td>
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<td></td>
<td>CE-XX</td>
<td>SNCR or equivalent reductions (1) (NOx)</td>
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<td>Boiler No. 1 - Natural Gas</td>
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<td>Low NOx Burner (NOx)</td>
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<td>EU-56-30</td>
<td>Boiler No. 2 - Natural Gas</td>
<td>CE-XX</td>
<td>Low NOx Burner (NOx)</td>
</tr>
</tbody>
</table>

(1) ADM may, through demonstration to the USEPA and Iowa DNR, employ alternate methods for reducing NOx emissions provided such methods achieve a level of NOx reduction that is determined to be equivalent to that which could be obtained through application of SNCR to both Boilers 6 & 7. For example, ADM may elect to permanently shut down either boiler 6 or 7, and the NOx reductions resulting from this shutdown are deemed to be equivalent reductions to the SNCR installations on Boilers 6 & 7. If ADM elects to install SNCR, this technology will be first applied to either boiler 6 or 7 as a technology demonstration. If the SNCR demonstration is successful in achieving at least 40% NOx reduction at an optimized ammonia addition rate with a slip of 10 ppm or less, ADM will install SNCR on the remaining unit. If the SNCR demonstration is not successful, ADM is not required to install SNCR on the remaining unit and no further NOx reduction projects are required for Boilers 6 & 7. In this event, ADM shall notify EPA and Iowa DNR whether it will continue to operate the initial SNCR installation, or remove it. ADM shall continue to operate the initial SNCR installation provided the NOx reduction efficiency is equal to or greater than 25% and the operation does not pose operational problems in downstream equipment including plugging and corrosion of economizers, air preheaters, particulate control equipment, or other similar issues, or that the operational costs of the SNCR are not excessive relative to the reductions achieved.

Alternative Control Equipment
ADM may substitute alternative control equipment for the equipment listed in this section, provided that ADM achieves the emission reductions specified in the Consent Decree.

Pollution Prevention/Source Reduction
ADM may substitute pollution prevention or source reduction measures for the control equipment listed in this section provided that ADM achieves the emission reductions specified in the Consent Decree.

1. For units with emissions that have been measured by the test methods specified in Section 9.0 of this CTP and for which results have been submitted to the USEPA and Iowa DNR, as summarized in Attachment 12 of the Consent Decree, achievement of equivalent emission reductions shall be determined by the following:
   \[ X <= Y * (1-Z) \]
   Where:
   \[ X = \text{lbs/hr emission rate post changes} \]
   \[ Y = \text{lbs/hr emission rate pre changes} \]
   \[ Z = \text{Control efficiency required by consent decree} \]

2. Where emissions have not been previously measured by the test methods specified in Section 9.0, ADM shall submit a written notice and test plan to the USEPA and Iowa DNR for purposes of determining a pre-change baseline. Upon completion of the test this baseline shall be used for determining equivalent reductions as specified in item 1 above.

3. Where a concentration (ppm) limit is also specified in the Consent Decree for the emission unit, a final, post change outlet test can be used in lieu of the calculation in subparagraph (1), above, to determine equivalent emission reductions.
4.0 Engineering Design Criteria for Pollution Control Equipment

Any deviation from the design criteria listed here shall be reported in the semi-annual reports and as required under other state and federal rules. Note that the specific design criteria listed here are preliminary and subject to change pending development of additional data. Changes to the requirements listed in the following table shall be considered non-material modifications under Paragraph 5 of the Consent Decree, provided ADM obtains written approval of the change(s) from USEPA and Iowa DNR.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
<th>Design Criteria Targets</th>
</tr>
</thead>
</table>
| Stearns Feed Dryer No. 1  | CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => 0.65 seconds  
                            |                     |                                | Temperature => 1600 °F       |
|                           | CE-XX               | Optimization of Scrubber (SO2)                | Gas Flow Rate => TBD* scfm  
                            |                     |                                | pH => TBD*                  |
|                           |                     |                                | Pressure Drop => TBD* in of water column  
                            |                     |                                | Scrubbing Liquor Flow Rate => TBD* |
| Stearns Feed Dryer No. 2  | CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => 0.65 seconds  
                            |                     |                                | Temperature => 1600 °F       |
|                           | CE-XX               | Optimization of Scrubber (SO2)                | Gas Flow Rate => TBD* scfm  
                            |                     |                                | pH => TBD*                  |
|                           |                     |                                | Pressure Drop => TBD* in of water column  
                            |                     |                                | Scrubbing Liquor Flow Rate => TBD* |
| Stearns Feed Dryer No. 3  | CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => 0.65 seconds  
                            |                     |                                | Temperature => 1600 °F       |
|                           | CE-XX               | Optimization of Scrubber (SO2)                | Gas Flow Rate => TBD* scfm  
                            |                     |                                | pH => TBD*                  |
|                           |                     |                                | Pressure Drop => TBD* in of water column  
                            |                     |                                | Scrubbing Liquor Flow Rate => TBD* |
| Gluten Intensa Dryer No. 1| CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => 0.65 seconds  
                            |                     |                                | Temperature => 1600 °F       |
|                           | CE-XX               | Optimization of Scrubber (SO2)                | Gas Flow Rate => TBD* scfm  
                            |                     |                                | pH => TBD*                  |
|                           |                     |                                | Pressure Drop => TBD* in of water column  
                            |                     |                                | Scrubbing Liquor Flow Rate => TBD* |
| Gluten Intensa Dryer No. 5| CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => 0.65 seconds  
<pre><code>                        |                     |                                | Temperature =&gt; 1600 °F       |
</code></pre>
<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
<th>Design Criteria Targets</th>
</tr>
</thead>
</table>
| Gluten Intensa Dryer No. 6| CE-XX               | Optimization of Scrubber (SO2)                 | Gas Flow Rate ≈ TBD* scfm pH ⇒ TBD*
|                           |                     |                                               | Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
|                           | CE-XX               | RTO (VOC, CO, PM/PM10)                        | Residence Time => > 0.65 seconds Temperature => > 1600 °F |
| Carbon Furnace No. 1      | CE-XX               | Optimization of Scrubber (SO2)                 | Gas Flow Rate ≈ TBD* scfm pH ⇒ TBD*
|                           |                     |                                               | Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
|                           | CE-XX               | RCO (VOC, CO, PM/PM10)                        | Residence Time => > 0.9 seconds Temperature => > 1600 °F |
| Carbon Furnace No. 2      | CE-XX               | Optimization of Scrubber (SO2)                 | Gas Flow Rate ≈ TBD* scfm pH ⇒ TBD*
|                           |                     |                                               | Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
|                           | CE-XX               | RCO (VOC, CO, PM/PM10)                        | Residence Time => > 0.9 seconds Temperature => > 1600 °F |
| Yeast Propagators        | CE-XX               | Scrubber (VOC)                                | Gas Flow Rate ≈ TBD* scfm Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
| Ethanol Fermenters        | CE-58-2             | Optimization of Scrubber (VOC)                 | Gas Flow Rate ≈ TBD* scfm Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
| Non-dedicated Ethanol Loadout | CE-XX             | Flare (VOC)                                   | Vapor Flow Rate (to flare) = TBD* |
| Stillage MR Vents         | CE-XX               | Scrubber (VOC)                                | Gas Flow Rate ≈ TBD* scfm Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |
| Vetter Dryers 1-5         | CE-XX               | Optimization of Scrubber (SO2)                 | Gas Flow Rate ≈ TBD* scfm pH ⇒ TBD*
<p>|                           |                     |                                               | Pressure Drop ⇒ TBD* in of water column Scrubbing Liquor Flow Rate ⇒ TBD* |</p>
<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
<th>Design Criteria Targets</th>
</tr>
</thead>
</table>
| Leader Dryers 1-4                | CE-XX               | Optimization of Scrubber (SO2)                | Gas Flow Rate \(\approx\) TBD* scfm  
 pH \(\Rightarrow\) TBD*  
 Pressure Drop \(\Rightarrow\) TBD* in of water column  
 Scrubbing Liquor Flow Rate \(\Rightarrow\) TBD* |
| Carbon Furnace 3                 | CE-25-72A           | Optimization of Scrubber (SO2)                | Gas Flow Rate \(\approx\) TBD* scfm  
 pH \(\Rightarrow\) TBD*  
 Pressure Drop \(\Rightarrow\) TBD* in of water column  
 Scrubbing Liquor Flow Rate \(\Rightarrow\) TBD* |
| Millhouse Scrubber               | CE-7-16             | Optimization of Scrubber (VOC)                | Gas Flow Rate \(\approx\) TBD* scfm  
 Pressure Drop \(\Rightarrow\) TBD* in of water column  
 Scrubbing Liquor Flow Rate \(\Rightarrow\) TBD* |
| Stoker Boilers No. 3-5           | N/A                 | Achieve Lowered Emission Limitation (SO2)     | Heat Input: 143 MMBtu/hour (each) |
| Cyclone Boiler No. 6             | CE-XX               | Achieve Lowered Emission Limitation (SO2)     | TBD                     |
|                                  | CE-XX               | TBD (NOx)                                     | TBD                     |
| Cyclone Boiler No. 7             | CE-XX               | Achieve Lowered Emission Limitation (SO2)     | TBD                     |
|                                  | CE-XX               | TBD (NOx)                                     | TBD                     |
| Boiler No. 1 - Natural Gas       | N/A                 | Low NOx Burner (NOx)                          | Heat Input: 142.6 MMBtu/hour  
 Target NOx Emission Rate: 0.06 lbs/MMBtu |
| Boiler No. 2 - Natural Gas       | N/A                 | Low NOx Burner (NOx)                          | Heat Input: 142.6 MMBtu/hour  
 Target NOx Emission Rate: 0.06 lbs/MMBtu |

* Value to be determined once detailed engineering has been completed for the control equipment.
5.0 Monitoring Parameters for Pollution Control Equipment

Beginning no later than 30 days following startup of the control equipment described below, ADM shall monitor the parameters listed below. Changes to the requirements listed in the following table shall be considered non-material modifications under Paragraph 5 of the Consent Decree, provided ADM obtains written approval of the change(s) from USEPA and Iowa DNR. All monitoring data collected shall be recorded and maintained on-site. Any deviation of monitoring frequency, record keeping and/or range shall be reported in the semi-annual reports and as required under other state and federal rules.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
<th>Parameter Monitored</th>
<th>Compliance Operating Range/Limit</th>
<th>Monitoring Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearns Feed Dryer No. 1</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH</td>
<td>&gt;= TBD*</td>
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<td></td>
<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
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<td></td>
<td>Scrubbant Flow Rate</td>
<td>&gt;= TBD*</td>
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<tr>
<td></td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
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<td></td>
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<td>Optimization of Scrubber (SO2)</td>
<td>pH</td>
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<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
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<td></td>
<td>Scrubbant Flow Rate</td>
<td>&gt;= TBD*</td>
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<tr>
<td>Stearns Feed Dryer No. 2</td>
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<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
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</tr>
<tr>
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<td></td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH</td>
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<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
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<td>Scrubbant Flow Rate</td>
<td>&gt;= TBD*</td>
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<td></td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
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<td>Continuously</td>
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<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
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<td>Scrubbant Flow Rate</td>
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<tr>
<td>Gluten Intensa Dryer No.1</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
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<td>Optimization of Scrubber (SO2)</td>
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<td>&gt;= TBD*</td>
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<td>Pressure Drop</td>
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<td>Scrubbant Flow Rate</td>
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<td></td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
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<td>Optimization of Scrubber (SO2)</td>
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<td>Scrubbant Flow Rate</td>
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<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
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<td>Optimization of Scrubber (SO2)</td>
<td>pH</td>
<td>&gt;= TBD*</td>
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<td>Pressure Drop</td>
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<td>Scrubbant Flow Rate</td>
<td>&gt;= TBD*</td>
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<td>Emission Unit Description</td>
<td>Control Equipment #</td>
<td>Control Equipment / Optimization Description</td>
<td>Parameter Monitored</td>
<td>Compliance Operating Range/Limit</td>
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<tr>
<td>Gluten Intensa Dryer No. 6</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Carbon Furnace No. 1</td>
<td>CE-XX</td>
<td>RCO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Carbon Furnace No. 2</td>
<td>CE-XX</td>
<td>RCO (VOC, CO, PM/PM10)</td>
<td>Operating Temperature</td>
<td>&gt;= TBD*</td>
<td>Continuously</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Yeast Propagators</td>
<td>CE-XX</td>
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<td>Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
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<tr>
<td>Ethanol Fermenters</td>
<td>CE-58-2</td>
<td>Optimization of Scrubber (VOC)</td>
<td>Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Non-dedicated Ethanol Loadout</td>
<td>CE-XX</td>
<td>Flare (VOC)</td>
<td>Presence of Pilot Flame</td>
<td>A device (including but not limited to a thermocouple, ultra-violet beam sensor, or infrared sensor) capable of continuously detecting the presence of a pilot flame.</td>
<td>Continuously</td>
</tr>
<tr>
<td>Stillage MR Vents</td>
<td>CE-XX</td>
<td>Scrubber (VOC)</td>
<td>Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Vetter Dryers 1-5</td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH Pressure Drop Scrubbant Flow Rate</td>
<td>&gt;= TBD* &gt;= TBD* &gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td>Emission Unit Description</td>
<td>Control Equipment #</td>
<td>Control Equipment / Optimization Description</td>
<td>Parameter Monitored</td>
<td>Compliance Operating Range/Limit</td>
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<tr>
<td>Leader Dryers 1-4</td>
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<td>Scrubbant FlowRate</td>
<td>&gt;= TBD*</td>
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<tr>
<td>Carbon Furnace 3</td>
<td>CE-25-72A</td>
<td>Optimization of Scrubber (SO2)</td>
<td>pH</td>
<td>&gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Scrubbant FlowRate</td>
<td>&gt;= TBD*</td>
<td></td>
</tr>
<tr>
<td>Millhouse Scrubber</td>
<td>CE-7-16</td>
<td>Optimization of Scrubber (VOC)</td>
<td>Pressure Drop</td>
<td>&gt;= TBD*</td>
<td>Once per day</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Scrubbant FlowRate</td>
<td>&gt;= TBD*</td>
<td></td>
</tr>
<tr>
<td>Cyclone Boilers 6 &amp; 7</td>
<td>CE-XX</td>
<td>TBD (NOx)</td>
<td>TBD**</td>
<td>TBD**</td>
<td>TBD**</td>
</tr>
</tbody>
</table>

* Value to be proposed by ADM based on actual operating conditions at the time of the performance test.
** To be determined based on selected emission reduction approach.
6.0 Continuous Emission Monitors

The control equipment listed below shall be equipped with Continuous Emissions Monitors (CEMs). All monitoring data shall be collected, recorded and maintained on-site in accordance with the requirements of this section. Any deviation of emission limits shall be reported in the semi-annual reports and as required under other state and federal rules.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Parameter Monitored</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Stoker Boilers No. 3, 4 &amp; 5</td>
<td>SO2</td>
</tr>
<tr>
<td>Coal Cyclone Boilers No. 6 &amp; 7</td>
<td>SO2</td>
</tr>
</tbody>
</table>

The SO2 CEMS for all boilers will meet the applicable requirements of 40 CFR Part 60. In addition, the SO2 CEMS for Boilers 6 & 7 will also meet the applicable requirements of 40 CFR Part 75, Subparts B (requirements for a flow monitoring system only) and Subpart D with the following exception: ADM is required to demonstrate that a flow monitor is technically infeasible under 40 CFR Part 75.11(c) or that it is economically impractical before submitting an alternative measurement procedure for approval to USEPA and Iowa DNR. The requirements of 40 CFR Part 75, Subparts A, C, E, F, G, and H do not apply. ADM shall maintain sufficient records and submit sufficient data in the semi-annual reports required by the Consent Decree to demonstrate compliance with the applicable emission limits and as required under other state and federal rules.
### 7.0 Emission Limits

The table below lists the emissions limits that must be met pursuant to Paragraph 19 of the Consent Decree. Any deviation from the emission limits shall be reported in the semi-annual report and as required under other state and federal rules. Where the “Emission Limits” column references “test and set,” the procedure will be that outlined in Section 10.0 of this CTP.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Control Equipment #</th>
<th>Control Equipment / Optimization Description</th>
<th>Pollutant</th>
<th>Emission Limit(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearns Feed Dryer No. 1</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Stearns Feed Dryer No. 2</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Stearns Feed Dryer No. 3</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 1</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 5</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 6</td>
<td>CE-XX</td>
<td>RTO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Carbon Furnace No. 1</td>
<td>CE-XX</td>
<td>RCO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td>Emission Unit Description</td>
<td>Control Equipment #</td>
<td>Control Equipment / Optimization Description</td>
<td>Pollutant</td>
<td>Emission Limit(s)</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>--------------------</td>
<td>---------------------------------------------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CO</td>
<td>90% control or &lt;= 100 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM/PM10</td>
<td>Test and set (2)</td>
<td></td>
</tr>
<tr>
<td>CE-XX Optimization of Scrubber (SO2) (1)</td>
<td></td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
<td></td>
</tr>
<tr>
<td>Carbon Furnace No. 2</td>
<td>CE-XX</td>
<td>RCO (VOC, CO, PM/PM10)</td>
<td>VOC</td>
<td>95% control or &lt;= 10 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CO</td>
<td>90% control or &lt;= 100 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>PM/PM10</td>
<td>Test and set (2)</td>
<td></td>
</tr>
<tr>
<td>CE-XX Optimization of Scrubber (SO2) (1)</td>
<td></td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
<td></td>
</tr>
<tr>
<td>Yeast Propagators</td>
<td>CE-XX</td>
<td>Scrubber (VOC) (1)</td>
<td>VOC</td>
<td>95% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Ethanol Fermenters</td>
<td>CE-58-2</td>
<td>Optimization of Scrubber (VOC) (1)</td>
<td>VOC</td>
<td>95% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Non-dedicated Ethanol Loadout</td>
<td>CE-XX</td>
<td>Flare (VOC)</td>
<td>VOC</td>
<td>95% control</td>
</tr>
<tr>
<td>Stillage MR Vents</td>
<td>CE-XX</td>
<td>Scrubber (VOC) (1)</td>
<td>VOC</td>
<td>&lt;= 20 ppm or Test and set (2)</td>
</tr>
<tr>
<td>Vetter Dryers 1-5</td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2) (1)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Leader Dryers 1-4</td>
<td>CE-XX</td>
<td>Optimization of Scrubber (SO2) (1)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Carbon Furnace 3</td>
<td>CE-25-72A</td>
<td>Optimization of Scrubber (SO2) (1)</td>
<td>SO2</td>
<td>90% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Millhouse Scrubber</td>
<td>CE-7-16</td>
<td>Optimization of Scrubber (VOC) (1)</td>
<td>VOC</td>
<td>95% control or &lt;= 20 ppm</td>
</tr>
<tr>
<td>Stoker Boilers No. 3-5</td>
<td>N/A</td>
<td>Achieve Lowered Emission Limitation (SO2)</td>
<td>SO2</td>
<td>SO2 emissions &lt;= 1.2 lb/MMBtu on a 30-day rolling average</td>
</tr>
<tr>
<td>Cyclone Boiler No. 6</td>
<td>CE-XX</td>
<td>Achieve Lowered Emission Limitation (SO2)</td>
<td>SO2</td>
<td>SO2 emissions from Boilers 6 &amp; 7 &lt;= 2,934 tons per rolling 12-month period</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TBD (NOx)</td>
<td>NOx</td>
<td>Emission reductions through application(s) of SNCR or equivalent projects, and establishment of emission limits. See details in Section 3 of this CTP.</td>
</tr>
<tr>
<td>Cyclone Boiler No. 7</td>
<td>CE-XX</td>
<td>Achieve Lowered Emission Limitation (SO2)</td>
<td>SO2</td>
<td>SO2 emissions from Boilers 6 &amp; 7 &lt;= 2,934 tons per rolling 12-month period</td>
</tr>
<tr>
<td>Emission Unit Description</td>
<td>Control Equipment #</td>
<td>Control Equipment / Optimization Description</td>
<td>Pollutant</td>
<td>Emission Limit(s)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>-----------</td>
<td>------------------</td>
</tr>
<tr>
<td>Combined SO2 emissions from Boilers 6 &amp; 7 &lt;= 338 tons per rolling 30-day period</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CE-XX</td>
<td>TBD (NOx)</td>
<td>NOx</td>
<td>Emission reductions through application(s) of SNCR or equivalent projects, and establishment of emission limits. See details in Section 3 of this CTP.</td>
<td></td>
</tr>
<tr>
<td>Boiler No. 1 - Natural Gas</td>
<td>N/A</td>
<td>Low NOx Burner (NOx) (1)</td>
<td>NOx</td>
<td>Test and set (2)</td>
</tr>
<tr>
<td>Boiler No. 2 - Natural Gas</td>
<td>N/A</td>
<td>Low NOx Burner (NOx) (1)</td>
<td>NOx</td>
<td>Test and set (2)</td>
</tr>
</tbody>
</table>

(1) All emission limitations (including operating parameter ranges and limits) apply at all times when the process equipment is operating, except, in the case of process equipment or pollution control systems, during previously planned startup and shutdown periods (including planned maintenance periods), and malfunctions as defined in 40 CFR Part 63. These startup and shutdown periods shall not exceed the minimum amount of time necessary for these events, and during these events, ADM shall minimize emissions to the extent practicable. To the extent practicable, startup and shutdown of pollution control systems will be performed during times when process equipment is also shut down. Also, ADM shall, to the extent practicable, control emissions during a malfunction event in a manner consistent with good air pollution control practice for minimizing emissions.

In addition, for dryer(s) controlled by RTOs not designed for on-line regeneration (i.e., bake-out) and that are not preceded by a WESP or equivalent device(s), the emission limitations do not apply to periods of off-line RTO regeneration not to exceed 50 dryer operating hours per calendar year and individual off-line RTO regeneration periods not to exceed 12 dryer operating hours. For RTOs servicing more than one dryer, a dryer operating hour is any hour in which one or more of the dryers is on line. Off-line RTO regeneration while all associated dryers are shut down is not included in these operating limitations. Also, off-line RTO regeneration periods that can be completed during unrelated shutdown, or malfunction periods (i.e., periods not related to the need to perform an off-line RTO regeneration) are not included in these limitations (i.e., ADM may perform "preventative" off-line RTO regenerations during periods when the RTO is off-line for other reasons such as when the RTO is off-line due to maintenance or malfunction of upstream PM control equipment which requires bypass of the RTO). ADM may petition USEPA and [insert state agency] to adjust these operating limitations for a specific RTO based on operating experience with the RTO and the dryer(s) on which the RTO is installed. Changes to these regeneration hour limitations shall be considered non-material modifications under Paragraph 5 of the Consent Decree, provided ADM obtains written approval of the change(s) from USEPA and Iowa DNR.

(2) Will follow the protocol in Section 10.0 of this CTP.
8.0 Schedules for Emission Reduction Projects
Any deviation from the applicable schedules shall be reported in the semi-annual reports and as required under other state and federal rules.

a) The following schedule implements paragraphs 28, 29, and 30 of the Consent Decree:
Primary Schedule - The following schedule is for emission reduction projects, which will begin implementation in the first calendar year following the lodging of the consent decree.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Emission Reduction Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Updated Schedule - For each subsequent calendar year for the life of the Consent Decree, ADM shall submit an updated schedule by January 30, as a part of the semiannual report required in Paragraph 44 of the Consent Decree, detailing the emission reduction projects to be undertaken during the upcoming calendar year. The updated schedule shall meet the implementation schedule required in the Consent Decree. The updated schedule shall include, if applicable, the following dates for each control project: date of change in operation, equipment shut-down date, equipment purchase date, equipment installation date, initial start-up date, and emission testing date. The updated schedule shall also include design criteria for new control equipment (including in the case of RTO’s, whether the unit is designed for on-line bakeout), method of decommissioning for permanently shutting down equipment, and any other details as applicable to each control project. Changes to the updated schedule shall be considered non-material modifications under Paragraph 5 of the Consent Decree.

b) The following projects will be installed based on the following schedule.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Emission Reduction Project</th>
<th>Installation Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiler No. 1</td>
<td>Low NOx Burner</td>
<td>December 31, 2007</td>
</tr>
<tr>
<td>Boiler No. 2</td>
<td>Low NOx Burner</td>
<td>December 31, 2007</td>
</tr>
<tr>
<td>Vetter Dryers 1-5</td>
<td>SO2 Optimization</td>
<td>December 31, 2006</td>
</tr>
<tr>
<td>Leader Dryers 1-4</td>
<td>SO2 Optimization</td>
<td>December 31, 2006</td>
</tr>
<tr>
<td>Cyclone Boiler 6 &amp; 7</td>
<td>SNCR or equivalent NOx reductions</td>
<td>December 31, 2012</td>
</tr>
</tbody>
</table>

c) The following projects are subject to the compliance demonstration deadline listed.

<table>
<thead>
<tr>
<th>Emission Unit Description</th>
<th>Emission Limit</th>
<th>Compliance Demonstration Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal Stoker Boilers 3, 4, &amp; 5</td>
<td>SO2 emissions &lt;= 1.2 lb/MMBtu on a 30-day rolling average</td>
<td>May 31, 2003</td>
</tr>
<tr>
<td>Coal Cyclone Boilers 6 &amp; 7</td>
<td>Combined SO2 emissions &lt;= 338 tons per rolling 30-day period</td>
<td>March 31, 2009</td>
</tr>
<tr>
<td>Coal Cyclone Boilers 6 &amp; 7</td>
<td>Combined SO2 emissions &lt;= 2,934 tons per rolling 12-month period</td>
<td>March 31, 2010</td>
</tr>
</tbody>
</table>
### 9.0 Pollution Control Equipment Performance Test Schedule and Test Methods
ADM shall conduct the following performance testing pursuant to the requirements in this CTP and Paragraphs 33 and 34 in the Consent Decree.

<table>
<thead>
<tr>
<th>Emission unit/ Pollution Control Device</th>
<th>Pollutant(s) Tested</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stearns Feed Dryer No. 1</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Stearns Feed Dryer No. 2</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Stearns Feed Dryer No. 3</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 1</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 5</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Gluten Intensa Dryer No. 6</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Carbon Furnace No. 1</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Carbon Furnace No. 2</td>
<td>VOC (inlet &amp; outlet)¹, CO (inlet &amp; outlet)¹, PM/PM10 (outlet), SO2 (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 5/202, 6 or 6C, 10, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Yeast Propagators</td>
<td>VOC (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Ethanol Fermenters</td>
<td>VOC (inlet &amp; outlet)¹</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used.²,³.</td>
</tr>
<tr>
<td>Non-dedicated Ethanol Loadout</td>
<td>Visible Emissions</td>
<td>Per 40 CFR 60.18 for open flame flare</td>
</tr>
<tr>
<td>Equipment/Process</td>
<td>Emission Type (inlet &amp; outlet)</td>
<td>Methodology Notes</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Stillage MR Vents</td>
<td>VOC (outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used for enclosed flame flare 2, 3.</td>
</tr>
<tr>
<td>Vetter Dryers 1-4</td>
<td>SO2 (inlet &amp; outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 6 or 6C</td>
</tr>
<tr>
<td>Leader Dryers 1-5</td>
<td>SO2 (inlet &amp; outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 6 or 6C</td>
</tr>
<tr>
<td>Carbon Furnace 3</td>
<td>SO2 (inlet &amp; outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 6 or 6C</td>
</tr>
<tr>
<td>Millhouse Scrubber</td>
<td>VOC (inlet &amp; outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, 18 as modified to include NCASI CI/WP-98.01, and 25 or 25A calibrated to propane will be used 2, 3.</td>
</tr>
<tr>
<td>Stoker Boilers No. 3-5</td>
<td>SO2 (outlet)</td>
<td>CEMs Part 60 Relative Accuracy Test Assessment (RATA)</td>
</tr>
<tr>
<td>Cyclone Boiler No. 6</td>
<td>SO2 (outlet)</td>
<td>CEMs Part 60 RATA</td>
</tr>
<tr>
<td></td>
<td>NOx (outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, and 7E (or approved alternative) if short term limit (i.e., 3 hour average) or CEMs Part 60 RATA if long term limit (i.e: 30 day average)</td>
</tr>
<tr>
<td>Cyclone Boiler No. 7</td>
<td>SO2 (outlet)</td>
<td>CEMs Part 60 RATA</td>
</tr>
<tr>
<td></td>
<td>NOx (outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, and 7E (or approved alternative) if short term limit (i.e., 3 hour average) or CEMs Part 60 RATA if long term limit (i.e: 30 day average)</td>
</tr>
<tr>
<td>Boiler No. 1 - Natural Gas</td>
<td>NOx (outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, and 7E</td>
</tr>
<tr>
<td>Boiler No. 2 - Natural Gas</td>
<td>NOx (outlet)</td>
<td>As applicable, Methods 1, 2, 3A or B, 4, and 7E</td>
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</table>

1. When any emissions limit in Section 7.0, expressed in ppm, is met, only outlet testing is required.
2. Tests to obtain VOC mass emission rates (i.e., Methods 1, 2, 3A or B, 4, and 18 as modified to include NCASI CI/WP-98.01 plus method 25) need only be performed on the exhaust from the final control equipment.
3. Outlet testing and control efficiency testing will be based on either Method 25 or Method 25A calibrated to propane, whichever is applicable depending on concentration (i.e., Method 25 is used on both the inlet and outlet when the outlet total hydrocarbon (THC) concentration is >= 50 ppm as carbon and Method 25A is used on both the inlet and outlet when the outlet THC concentration is < 50 ppm as carbon).
10.0 Procedures for Optimization of Control Equipment and Setting Emission Limits

PM/PM10, NOx & VOC Emissions Limits

ADM has agreed to establish PM/PM10, NOx, & VOC emission limits for certain emissions units based on testing to be conducted following startup of the control equipment listed in Section 3.0 of this CTP. These limits are to be established pursuant to the requirements of Paragraphs 34, 36A, and 36B of the Consent Decree. ADM will conduct a minimum of one test (i.e., three 1-hour runs) using the methods specified in Section 9.0 of this CTP. ADM may, at its option, conduct additional tests on any emission unit to provide a more extensive database on which to base the unit's limit.
Appendix F: Extraction Requirement from Consent Decree
made a diligent inquiry of those individuals immediately responsible for obtaining the information and that to the best of my knowledge and belief, the information submitted herewith is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.”

Each such report and certification shall be reviewed and initialed by a corporate official at the vice presidential level or higher. If the signatory is such an official, the report and certification may be peer-reviewed and initialed.

VII. **COMPLIANCE PROGRAM FOR VEGETABLE OILSEED PLANTS**

**PROGRAM SUMMARY:** ADM shall reduce air emission of VOCs and HAPs by approximately 4,000 tons per year by lowering solvent losses at 26 vegetable oil extraction plants nationwide. ADM shall accomplish the reductions by upgrading existing equipment, adding new equipment, piloting innovative technology, and establishing a final VOC Solvent Loss Ratio (SLR) limit for each plant. ADM shall achieve compliance in accordance with the schedule set forth in the “Oilseed Control Technology Plans”. ADM shall comply with interim emission limits at 12 plants and final emission limits for all 26 plants, as established under the Consent Decree. ADM shall incorporate all final limits in federally enforceable operating permits for each facility.

A. **INTERIM LIMITS**

47. By no later than 90 days following lodging of this Consent Decree, ADM shall begin to account for solvent loss and quantity of oilseeds processed to comply with the following VOC solvent loss ratio (“SLR”) limits at the following nine plants:

| Decatur, Illinois - Corn Germ | 0.31 gal/ton |
Goodland, Kansas - Sunflower  0.34
Mankato, Minnesota - Conventional Soybean  0.15
Memphis, Tennessee - Large Cottonseed  0.37
Mexico, Missouri - Conventional Soybean  0.18
Richmond, Texas - Small Cottonseed  0.25
Valdosta, Georgia - Conventional Soybean  0.15

Valdosta, Georgia - Large Cottonseed  0.30
Velva, North Dakota - Canola  0.33

The first compliance determination will be based on the first 12 operating months of data collected after the date on which ADM begins to account for solvent loss under this paragraph. “Operating month” is defined according to the definition provided in 40 C.F.R. Part 63, Subpart GGGG.

48. By no later than April 12, 2003, ADM shall begin to account for solvent loss and quantity of oilseeds processed to comply with a VOC SLR limit of 0.20 gal/ton at the following three plants:

Fostoria, Ohio
Fremont, Nebraska
Lincoln, Nebraska
The first compliance determination will be based on the first 12 operating months of data collected after the date on which ADM begins to account for solvent loss under this paragraph.

B. DECATUR EAST SPECIALTY SOYBEAN PLANT.

PROGRAM SUMMARY - WHITE FLAKE COOLER VENT PROJECT: ADM shall implement a program with the goal of achieving a reduction of 90% or greater in VOC emissions from the white flake cooler vents for the white flake lines at the Decatur East Specialty Soybean Plant (Decatur East Plant). The program is described in detail in the Decatur East CTP, Attachment 10. The first step consists of piloting a Vacuum Assisted Desolventizing System (VADS) on one white flake line. If this technology meets the performance criteria in the CTP, ADM will install it on the other white flake lines. If it does not, ADM must conduct engineering evaluations and, if appropriate, a pilot program, directed toward identifying an alternative technology that is technologically and economically feasible, and meets the performance criteria. If such an alternative technology is identified, and has all necessary regulatory clearances under the Federal Food, Drug, and Cosmetic Act, ADM must install it on its white flake lines. The emission reduction benefits from this program would be addressed in the final SLR limit for the Decatur East Plant, which will be established pursuant to Paragraph 70.

49. By no later than 12 months following lodging of this Consent Decree, ADM shall install a Vacuum Assisted Desolventizing System (“VADS”) on one of the three white flake lines at its Decatur East plant, that are currently equipped with flash desolventizer/deodorizer technology.
50. After start-up, ADM shall operate the VADS-equipped white flake line at representative operating conditions, in order to determine whether it is capable of meeting the performance criteria in the Decatur East CTP.

51. By no later than 21 months after lodging of this Consent Decree, ADM shall submit a report to EPA and the Illinois Environmental Protection Agency (“IEPA”) on the evaluation of the VADS-equipped white flake line. The report shall include a determination whether the VADS-equipped white flake line is capable of meeting the performance criteria in the Decatur East CTP. Specifically, the report shall include solvent loss and crush data, monitoring data, and all assumptions and calculations used to estimate the emission reduction benefit of the VADS technology.

52. If it is determined that the VADS-equipped white flake line meets the performance criteria in the Decatur East CTP, ADM shall install a VADS on each of the other two white flake lines, or a single VADS on both lines, not later than one year after the determination required under Paragraph 51.

53. If it is determined that the VADS-equipped white flake line does not meet the performance criteria in the Decatur East CTP, ADM shall submit:

(a). In the report required under Paragraph 51, or a separate report if ADM requests and EPA approves an extension, an
evaluation of the technical feasibility, estimated control efficiency, and cost-effectiveness of alternate technologies for controlling VOC emissions from the white flake cooler vents for its white flake lines.

(b). In the report under Paragraph 51, ADM shall report whether the VADS is to remain in place, or be removed.

54. (a). Evaluation of Alternative Technologies: The evaluation of alternative technologies in the report required under Paragraph 53 shall include all potentially applicable technologies that are capable of reducing VOC emissions from the white flake cooler vents for a white flake line. The target control efficiency for each technology is 90%. Two of the technologies to be evaluated shall be:

1. a fluidized bed adsorption system using polymeric resin; and
2. a bioreactor system using engineered microorganisms.

ADM shall evaluate alternative control technologies with control efficiencies lower than 90% if it is determined that the control technology is technically feasible and cost-effective.

(b). Evaluation of Technical Feasibility: The technical feasibility portion of the evaluation report required by Paragraph 53 shall include a detailed engineering analysis of
each technology and focus on whether the technology can meet the
performance criteria specified in the Decatur East CTP, and fire
safety standards. The engineering analysis shall include, as
appropriate, manufacturer’s design specifications and performance
criteria, any data from pilot or full-scale implementations of
the technology that is relevant to this proposed evaluation, any
estimates of emission reductions for each technology, and all
calculations, assumptions and/or operating data used to estimate
control efficiencies.

(c). Evaluation of Economic Feasibility: The cost
effectiveness portion of the evaluation will be conducted on an
annualized basis, in terms of cost per ton of reduced emissions,
and submitted for EPA approval. The cost per ton estimates shall
take into account all costs associated with the installation and
implementation of the control measure in question, and may
include costs associated with process and plant changes necessary
to accommodate the control measures provided that the report also
addresses any benefits to ADM from such changes. The report
shall include detailed supporting information for the
determination of the cost-effectiveness including all
calculations and assumptions. For purposes of this Consent
Decree, a cost effectiveness of less than $5,000 per ton of VOC
removed/recovered is presumptively cost effective, and a cost
effectiveness of greater than $10,000 per ton of VOC
removed/recovered is presumptively not cost effective. The report also shall evaluate whether these alternative technologies have all necessary clearances under the Federal Food, Drug and Cosmetic Act ("FFDCA"), where applicable.

55. If one or more of the alternative technologies is technically feasible, and is cost effective, the report under Paragraphs 51 and 53 shall include a plan for the installation of one of these alternative technologies on the white flake cooler vent for a white flake line, to evaluate whether it is capable of meeting the performance criteria in the CTP. That plan shall include an installation schedule with intermediate milestones.

56. If the technology selected for installation under Paragraph 55 does not have all necessary clearances under the FFDCA, ADM’s plan for installation shall include a schedule for applying for such clearances. The plan shall provide for the installation of the technology only after obtaining such clearances, if it would be economically infeasible to produce food or feed that was not adulterated (within the meaning of the FFDCA).

57. The plan under Paragraph 55 shall also provide for operating the white flake line equipped with the alternative technology at representative operating conditions, to determine whether this alternative technology is capable of meeting the performance criteria in the CTP. By no later than 7 months after
installing the alternative technology, ADM shall submit a report to EPA and IEPA on this evaluation. The report shall include a determination whether the alternative technology-equipped white flake line is capable of meeting the performance criteria in the Decatur East CTP.

58. If it is determined that the alternative technology-equipped white flake line meets the performance criteria in the Decatur East CTP, the report under Paragraph 57 shall include a plan for implementing the technology on the other white flake line or other two white flake lines (if the VADS system has been removed, pursuant to Paragraph 53). The plan shall include an installation schedule, with interim milestones. If it is determined that the alternative technology does not meet the performance criteria in the CTP, ADM, EPA, and IEPA will meet to discuss control alternatives prior to dispute resolution.

C. DECATUR WEST CONVENTIONAL SOYBEAN PLANT

59. In accordance with the Decatur West CTP, ADM shall conduct the following emission reduction projects at its Decatur West conventional soybean plant:

(a). By no later than 12 months following lodging of this Consent Decree, ADM shall upgrade the desolventizer toaster/dryer cooler ("DTDC").
(b). ADM will install a new “once-through cold water” condenser following the vent condenser pursuant to the schedule in Paragraph 60. ADM will address emission reduction benefits from these projects in the final SLR limit for this plant, which will be established pursuant to the schedule and formula set out in Paragraph 66.

D. CONDENSER UPGRADES

60. By no later than the dates set forth in this Paragraph, ADM shall upgrade its oilseed plants so that all plants have condenser systems that include, at a minimum, a dedicated “extractor condenser” for the extractor and a once-through cold water condenser following the vent condenser. These condenser upgrades shall be completed on the following schedule:

- 11 plants (50%) by April 1, 2004
- 16 plants (75%) by April 1, 2005
- 21 plants (100%) by April 1, 2006

Attachment 9, identifies the ADM plants that will receive these condenser upgrades.

E. OILSEED RECORDKEEPING AND REPORTING

1 or the first day of the plant’s first normal operating period thereafter under 40 C.F.R. Part 63, Subpart GGGG, if the plant is not operating on April 1, 2006.
61. For all plants subject to interim or final VOC SLR limits, ADM shall maintain the records required by 40 C.F.R. Part 63, Subpart GGGG on solvent loss and quantity of oilseed processed.

62. For all plants subject to interim or final VOC SLR limits, ADM shall maintain the records required by 40 C.F.R. Part 63, Subpart GGGG, for any malfunction period as defined in Paragraphs 74 and 75 below.

63. Decatur West Project Report. By no later than 45 days after the lodging of this Consent Decree, ADM shall submit a report to the Plaintiffs that specifies the DTDC improvement project details and the completion date to demonstrate that the deadline in Paragraph 59 has been met.

64. Condenser Project Reports. In the semiannual reports due on July 30th of 2004, 2005 and 2006, ADM shall submit reports to Plaintiffs identifying the plants at which upgraded condenser systems have been installed since the last reporting period and ADM’s tentative projections for the remaining installations, to demonstrate that the deadlines in Paragraph 60 have been and will be met. For any plant not operating on April 1, 2006, the report shall be submitted 30 days after the installation deadline under Paragraph 60.

65. Control Technology and Technique Report. By no later than 21 months after lodging of this Consent Decree, ADM shall
submit a report to EPA describing technologies and techniques it has implemented for controlling VOC emissions at oilseed plants, for use by the Plaintiffs to foster the transfer of such techniques and technology across the industry. The report shall include the following information for one of each category of oilseed plant for which final VOC SLR limits are required under Paragraphs 66 through 70, and at which a project has been completed:

(1) a brief characterization of each plant (e.g., oilseed type, crush throughput);
(2) emission reduction projects;
(3) project costs;
(4) emission reductions resulting from these projects; and
(5) the basis for the emission reduction and cost estimates.

The report, at a minimum, shall address the technologies and techniques identified in Paragraphs 49 through 60 above that were implemented. The report may include Confidential Business Information ("CBI") in a separate section where such information is deemed necessary to proper understanding of the technologies by the Plaintiffs.

**F. FINAL PERMIT LIMITS**

66. By no later than December 31, 2007, ADM shall propose in writing to the Plaintiffs final VOC SLR limits for each oilseed plant (except the Decatur East plant) that satisfy the requirements of Paragraphs 67 through 69. Final VOC limits for plants subject to interim limits may be higher than, lower than,
or the same as the interim limits, provided that the requirements of this Consent Decree are satisfied. For a plant that has an existing permit limit lower than the applicable solvent loss factor (“SLF”) in 40 C.F.R. Part 63, Subpart GGGG (vegetable oil production NESHAP), ADM may not propose a Final SLR limit that is greater than the existing limit. For each oilseed plant, the first compliance determination will be based on the first 12 operating months of data collected after the date on which each VOC SLR limit is proposed.

67. The capacity-weighted average of the Final SLR limits shall not exceed the following limits for each oilseed group:

- 0.175 gal/ton for conventional soybean plants
- 0.33 gal/ton for large cottonseed plants
- 0.35 gal/ton for canola and small cottonseed plants
- 0.30 gal/ton for corn germ and sunflower plants.

The Oilseed CTP, Attachment 9, identifies the ADM plants that fall within each oilseed group, and provides the formula for calculating the capacity-weighted averages of the Final SLR limits for each oilseed category.

68. These capacity-weighted averages shall be based on the design capacity for each facility. By no later than 90 days following lodging of this Consent Decree, ADM shall submit, for approval by EPA and the appropriate Plaintiffs, the design capacity values for each plant in the categories listed in
Paragraph 67. ADM shall not use a value higher than the approved design capacity value without the approval of EPA and the appropriate Plaintiff. For purposes of this Consent Decree, design capacity is the “maximum permitted crush capacity” that a plant is allowed to process in a given time period under its operating permit, or, if no limit is included in the operating permit, the facility’s maximum physical capacity. This number shall be expressed as “tons of crush per day.”

69. For plants that process multiple seed types, the VOC SLR limit shall be 90% of the Solvent Loss Factor (“SLF”) under 40 C.F.R. Part 63, Subpart GGGG, § 63.2840(a)(1) for a multiple seed plant. These plants include:

(a). Enderlin, North Dakota (canola, soy, and sunflower)
(b). Lubbock, Texas (corn germ, cottonseed, and peanuts)
(c). Red Wing, Minnesota (canola, flax, and sunflower)

70. ADM shall propose a final VOC SLR limit for the Decatur East specialty soybean plant, not later than two and one-half years (30 calendar months) after: (1) completing installation of the last emission reduction project pursuant to Paragraphs 49 through 58 above; or (2) a determination that no emission reduction project beyond a pilot scale installation is required under Paragraphs 49 through 58. The final VOC SLR limit shall be based upon at least two years of data (unless ADM determines that less operating data is necessary), process variability, a
reasonable certainty of compliance, and all other available and relevant information. EPA and IEPA will review the Final SLR limit proposed by ADM and will either: (a) Approve ADM’s proposed SLR limit, or (b) Propose an alternate SLR limit based on the information and data submitted pursuant to this paragraph.

71. Immediately upon proposal, ADM shall begin to account for solvent loss and quantity of oilseeds processed to comply with proposed final VOC SLR limits. For each oilseed plant, the first compliance determination will be based on the first 12 operating months of data collected after the date on which each VOC SLR limit is proposed. Plaintiffs will review the Final SLR limits proposed by ADM and will either: (a) Approve ADM’s proposed SLR limits, or (b) Propose an alternate SLR limit(s) based on the information and data submitted pursuant to this paragraph. If a final VOC SLR limit is established pursuant to this Consent Decree for a plant that is different from the proposed limit, ADM shall begin to account for solvent loss and quantity of oilseed processed to comply with that limit on the date that it has been approved by the appropriate Plaintiffs. For each oilseed plant, the first compliance determination will be based on the first 12 operating months of data collected after the date on which the Final SLR limit is approved.

72. Within 90 days after proposal of the Final SLR limits, ADM shall apply to the appropriate permitting authority for the
appropriate federally enforceable operating permits which incorporate these limits.

G. DEMONSTRATION OF COMPLIANCE

73. Solvent Loss Limits. Compliance with the interim and final VOC SLR limits in this Consent Decree shall be determined in accordance with 40 C.F.R. Part 63, Subpart GGGG, with the following exceptions: (1) provisions pertaining to HAP content shall not apply; (2) monitoring and recordkeeping of solvent losses at each plant shall be conducted daily; (3) solvent losses and quantities of oilseed processed during startup and shutdown periods shall not be excluded in determining solvent losses; and (4) records shall be kept in the form of the table in Attachment 13, that show total solvent losses, solvent losses during malfunction periods, and adjusted solvent losses (i.e., total solvent losses minus malfunction losses) monthly and on a twelve-month rolling basis.

74. Malfunctions. ADM may apply the provisions of 40 C.F.R. Part 63, Subpart GGGG pertaining to malfunction periods only when the conditions in both subparagraph (i) and (ii) are met:

(i) The malfunction results in a total plant shutdown. For purposes of this Consent Decree, a “total plant shutdown” means a shutdown of the solvent extraction system.
(ii) Cumulative solvent losses during malfunction periods at a plant do not exceed 4,000 gallons in a 12-month rolling period. At all other times, ADM must include all solvent losses when determining compliance with its interim or final VOC SLR limits at each plant.

75. During a malfunction period, ADM shall comply with the Startup, Shutdown, Malfunction (“SSM”) Plan as required under Subpart GGGG for the plant. The solvent loss corresponding to a malfunction period will be calculated as the difference in the total solvent inventories for the day before the malfunction period began and the day the plant resumes normal operation.

H. QUINCY, ILLINOIS COAL BOILERS

76. ADM’s Quincy, Illinois Coal-fired boilers 1 and 2 must comply with a NOx emissions limit of 0.43 lbs/MMBtu which will be incorporated into the applicable state operating permit as soon as practicable. Compliance with this limit will be measured in the common stack from these units. ADM will conduct two compliance tests (i.e., three one-hour measurements using Methods 3A and 7E) on these units with one test during the 2003 or 2004 ozone season and one in the winter months between the two ozone seasons.
Appendix G: Agency O&M Plans

ADM Clinton Plant-Wide Dust Collector Agency Operation & Maintenance Plan

Monitoring Guidelines
ADM makes a commitment to take timely corrective action during periods of excursions where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with the Applicable Requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Applicable Emission Units

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Monitoring Methods & Corrective Actions

General
Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.

Weekly
- The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (greater than the permit limit) is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.
- Check and document the Dust Collector pressure drop. If the pressure drop falls below the recent normal operating range (or below a specific permit limit), investigative/corrective action will start within 8 hours of findings to return the pressure drop to normal or identify the reason for the drop. If the pressure drop exceeds the recent normal operating range (or above a specific permit limit), corrective action will be taken at the next scheduled downtime, but not to exceed a two week period.
- Maintain a written or electronic record of the observations and any action resulting from the inspection.

Monthly
- Check the hopper functions and performance.
- Conduct a walk-around inspection of the Dust Collector system to search for leaks. If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours of findings.
- Maintain a written record of the inspection and any action resulting from the inspection.

Quarterly
- Check the air delivery system for appropriate line pressure.
- Check the operation, sequencing, and pulse duration of the cleaning cycle.

If abnormal conditions are detected which would effect emissions to the atmosphere, the appropriate corrective measures will be initiated within eight (8) hours of findings. Other identified issues will be scheduled for future repair.

- Maintain a written record of the inspection and any action resulting from the inspection.
Record Keeping and Reporting

- Maintain a written or electronic record of all inspections and any action resulting from the inspections.
- The facility will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- The equipment will be operated and maintained according to typical food industry standards and/or as outlined in the above monitoring requirements.
- An adequate inventory of spare parts shall be kept.
ADM Clinton Plant-wide Cyclone Agency Operation & Maintenance Plan

Monitoring Guidelines
ADM makes a commitment to take timely corrective action during periods of excursions where the indicators are out of range. A corrective action may include an investigation of the reason for the excursion, evaluation of the situation and necessary follow-up action to return operation within the indicator range. An excursion is determined by the averaged discrete data point over a period of time. An excursion does not necessarily indicate a violation of an applicable requirement. If the corrective action measures fail to return the indicators to the appropriate range, the facility will report the exceedance to the department and conduct source testing within 90 days of the exceedance to demonstrate compliance with Applicable Requirements. If the test demonstrates compliance with emission limits then new indicator ranges must be set for monitoring and the new ranges must be incorporated in the operating permit. If the test demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a schedule to implement corrective action to bring the source into compliance and demonstrate compliance.

Applicable Emission Units

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Monitoring Methods & Corrective Actions

General
- Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.
- The facility will maintain a written or electronic record of the observations, deficiencies, and any action resulting from the inspections.
Weekly

- The facility shall check for visible emissions weekly during a period when the emission unit is in operation and record the observation. If visible emissions are observed this would be an excursion not a violation, and corrective action will be started as soon as possible, but no later than within 8 hours of findings. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be required. If an opacity (greater than the permit limit) is observed, this would be a violation and corrective action will be started as soon as possible, but no later than within 8 hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake readings at approximately 2 hour intervals throughout the day. If unsuccessful that day due to weather, an observation shall be made the next possible day in which the equipment is operating and weather permits.
- Inspect the solids discharge valve for proper operation. Conduct visual inspection of air lock discharging and/or cyclone level.
- The facility will maintain a written or electronic record of the observation, deficiencies, and any action resulting from the inspections.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be started within eight (8) hours of findings.

Semi-Annually

- Inspect the structural components including the cyclone inlet/outlet ductwork and cyclone body for leaks or component failure.
- The facility will maintain a written record of the observation, deficiencies, and any action resulting from the inspections.

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented within eight (8) hours of findings.

Annually

If leaks or abnormal conditions are detected the appropriate measures for remediation will be implemented before the system is returned to service.

Record Keeping and Reporting

- The facility will maintain a written or electronic record of all inspections and any action resulting from the inspections.
- The facility will keep maintenance and inspection records for five (5) years and will be available upon request.

Quality Control

- The equipment will be operated and maintained according to typical food industry standards and/or as outlined in the above monitoring requirements.
ADM Clinton Plant-wide Packed Bed/General Wet Scrubber Agency
Operation & Maintenance Plan

Monitoring Guidelines
ADM makes a commitment to take timely corrective action during periods of excursions where
the indicators are out of range. A corrective action may include an investigation of the reason for
the excursion, evaluation of the situation and necessary follow-up action to return operation
within the indicator range. An excursion is determined by the averaged discrete data point over a
period of time. An excursion does not necessarily indicate a violation of an applicable
requirement. If the corrective action measures fail to return the indicators to the appropriate
range, the facility will report the exceedance to the department and conduct source testing within
90 days of the exceedance to demonstrate compliance with Applicable Requirements. If the test
demonstrates compliance with emission limits then new indicator ranges must be set for
monitoring and the new ranges must be incorporated in the operating permit. If the test
demonstrates noncompliance with emission limits, then the facility, within 60 days, proposes a
schedule to implement corrective action to bring the source into compliance and demonstrate
compliance.

### Applicable Emission Units

<table>
<thead>
<tr>
<th>Emission Point ID #</th>
<th>Control Equip ID #</th>
<th>Description</th>
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<tr>
<td>7-16</td>
<td>CE7-16</td>
<td>SO2 Scrubber</td>
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<td>CE7-16A</td>
<td>VOC Scrubber</td>
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<td>CE36-19</td>
<td>Oilhouse #1 Scrubber</td>
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<tr>
<td></td>
<td>CE36-19B</td>
<td>CECO Scrubber</td>
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<tr>
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<td>CE36-20C</td>
<td>Wet Cyclone</td>
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<tr>
<td></td>
<td>CE36-20 D</td>
<td>Wet Cyclone</td>
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<tr>
<td></td>
<td>CE36-20F</td>
<td>#2 Oilhouse Scrubber</td>
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<td></td>
<td>CE58-3</td>
<td>Fermenter Scrubber</td>
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</table>
Monitoring Methods & Corrective Actions

General
• Periodic Monitoring is not required during periods of time greater than one day in which the source does not operate.
• If flow rates or pressure drop levels are occurring outside the normal operating range, investigative/corrective action will start within 8 hours of findings.

Weekly
• Check and document the scrubbing liquid circulating and make-up flow as appropriate and pressure drop across the scrubber. If the flow or pressure drop falls out of the recent normal operating range, based upon observed averages and ranges over the past year of operations (or outside a specific permit limit range), corrective action will be started within eight (8) hours of findings to return the operations to normal. The recent normal operating range shall also be documented on each record used for documenting the readings. Changes to these operating ranges shall be documented to include the reason and justification for the change. Conduct observations of the stack and areas adjacent to the stack to determine if excess droplet re-entrainment is occurring from an improperly operating mist eliminator. The signs of droplet re-entrainment may include fallout of solid-containing droplets, discoloration of the stack and adjacent surfaces, or a mud lip around the stack. If excess droplet re-entrainment is occurring, the appropriate measures for remediation will be started with eight (8) hours of findings.
• Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Quarterly
• Conduct a walk-around inspection of the entire system to search for leaks. If leaks in the system are detected, the appropriate measures for remediation will be started within eight (8) hours of findings.
• Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Annually (contingent on accessibility during shutdown period)
• Conduct an internal inspection of the scrubber to search as appropriate for signs of erosion, corrosion, or solids deposits, solids accumulation in mist eliminators, and plugged or eroded spray nozzles. If any of these conditions exist the appropriate measures for remediation will be started within eight (8) hours of findings.
• Maintain a written or electronic record of the inspection and any action resulting from the inspection.

Record Keeping
• Maintain a written or electronic record of all inspections and any action resulting from the inspections.
• The facility will keep maintenance and inspection records for five (5) years and will be available upon request.
Quality Control

- The equipment will be operated and maintained according to typical food industry standards and/or as outlined in the above monitoring requirements.