Iowa Department of Natural Resources
Title V Operating Permit

Name of Permitted Facility: National Centers for Animal Health
Facility Location: 1920 Dayton Avenue, Ames, IA 50010
Air Quality Operating Permit Number: 02-TV-001R3
Expiry Date: September 25, 2024
Permit Renewal Application Deadline: March 25, 2024

EIQ Number: 92-5201
Facility File Number: 85-01-017 (*)
(*) This permit also includes USDA-National Veterinary Services Laboratory (Facility Number 85-01-056)

Responsible Official
Name: Dr. Susan Brockmeier
Title: NCAH Associate Director
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Email: susan.brockmeier@usda.gov

Permit Contact Person for the Facility
Name: Ms. Karla Tebben
Title: NCAH Environmental Protection Specialist
Mailing Address: 1920 Dayton Avenue, Ames, IA 50010
Phone #: (515) 337-7026
Email: karla.k.tebben@usda.gov

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. This permit is for two combined facilities: National Centers for Animal Health and USDA- National Veterinary Services Laboratory.

For the Director of the Department of Natural Resources

Lori Hanson, 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
IAC............................Iowa Administrative Code
IDNR .........................Iowa Department of Natural Resources
MVAC..........................motor vehicle air conditioner
NAICS.........................North American Industry Classification System
NSPS .........................new source performance standard
ppmv ........................parts per million by volume
lb./hr..........................pounds per hour
lb./MMBtu ........................pounds per million British thermal units
SCC.............................Source Classification Codes
scfm..........................standard cubic feet per minute
SIC.............................Standard Industrial Classification
TPY.............................tons per year
USEPA.........................United States Environmental Protection Agency

Pollutants

PM..............................particulate matter
PM$_{10}$..........................particulate matter ten microns or less in diameter
SO$_2$ ........................sulfur dioxide
NOx..............................nitrogen oxides
VOC.............................volatile organic compound
CO...............................carbon monoxide
HAP.............................hazardous air pollutant
I. Facility Description and Equipment List

Facility Name: National Centers for Animal Health  
Permit Number: 02-TV-001R3  
Facility Description: Noncommercial Research Organization (SIC 8733, 8734)

<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>S-4</td>
<td>S-4</td>
<td>Incinerator # 4</td>
<td>92-A-045-S7</td>
</tr>
<tr>
<td>S-5</td>
<td>S-5</td>
<td>Incinerator # 5</td>
<td>95-A-001-S5</td>
</tr>
<tr>
<td>S-6</td>
<td>S-6</td>
<td>Paraformaldehyde Vents</td>
<td>NA</td>
</tr>
<tr>
<td>S-10</td>
<td>S-10</td>
<td>Cleaver Brooks Boiler #1</td>
<td>01-A-843-S5</td>
</tr>
<tr>
<td>S-1C</td>
<td>S-1C</td>
<td>Boiler #3 – Murray</td>
<td>05-A-290-S4</td>
</tr>
<tr>
<td>S-20</td>
<td>S-20</td>
<td>Boiler #4 – Cleaver Brooks</td>
<td>19-A-167</td>
</tr>
<tr>
<td>S-15</td>
<td>S-15</td>
<td>Boiler #5</td>
<td>06-A-113-S3</td>
</tr>
<tr>
<td>S-13</td>
<td>S-13</td>
<td>2000 kW Emergency Generator #4</td>
<td>05-A-276-S3</td>
</tr>
<tr>
<td>S-14</td>
<td>S-14</td>
<td>2000 kW Emergency Generator #1</td>
<td>05-A-277-S3</td>
</tr>
<tr>
<td>S-16</td>
<td>S-16</td>
<td>3.5 MW Combustion Turbine with 21.9 MMBtu/hr Heat Recovery Steam Generator (HRSG)</td>
<td>06-A-1149-S2</td>
</tr>
<tr>
<td>S-16A</td>
<td>S-16A</td>
<td></td>
<td>06-A-1308-S2</td>
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<td>S-17</td>
<td>S-17</td>
<td>2000 kW Emergency Generator #5</td>
<td>06-A-1150-S2</td>
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<tr>
<td>S-18</td>
<td>S-18</td>
<td>2000 kW Emergency Generator #2</td>
<td>06-A-1151-S2</td>
</tr>
<tr>
<td>S-19</td>
<td>S-19</td>
<td>2000 kW Emergency Generator #6</td>
<td>11-A-091</td>
</tr>
<tr>
<td>6K GT</td>
<td>6K GT</td>
<td>6,000 Gallon Gasoline Tank</td>
<td>NA</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>800 kW Emergency Generator</td>
<td>03-A-1247-S1</td>
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<tr>
<td>MB Gen</td>
<td>MB</td>
<td>500 kW Emergency Generator</td>
<td>14-A-427-S1</td>
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</table>
**Insignificant Activities Equipment List**

<table>
<thead>
<tr>
<th>Insignificant Emission Unit Number</th>
<th>Insignificant Emission Unit Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT2</td>
<td>Propane Tanks (17)</td>
</tr>
<tr>
<td>WELD</td>
<td>Maintenance Welding (10 welders)</td>
</tr>
<tr>
<td>PW</td>
<td>Maintenance Parts Washer (1)</td>
</tr>
<tr>
<td>FS</td>
<td>Feed Storage Bins (37) with Silage Bags (5-8)</td>
</tr>
<tr>
<td>CT</td>
<td>Cooling Tower</td>
</tr>
<tr>
<td>LPG Heaters</td>
<td>LPG Comfort Heaters</td>
</tr>
<tr>
<td>EU-100K FO AST</td>
<td>100,000 gallon above-ground Diesel Fuel Storage Tank</td>
</tr>
<tr>
<td>EU-1K FO AST</td>
<td>1,000 gallon above-ground Diesel Fuel Storage Tank</td>
</tr>
<tr>
<td>MB-1</td>
<td>1.5 MMBtu/hr Boiler NG/LPG</td>
</tr>
<tr>
<td>MB-2</td>
<td>1.5 MMBtu/hr Boiler NG/LPG</td>
</tr>
<tr>
<td>MB-3</td>
<td>0.837 MMBtu/hr Boiler NG/LPG</td>
</tr>
<tr>
<td>Freezer Farm</td>
<td>200 kW Emergency Generator</td>
</tr>
<tr>
<td>C3</td>
<td>100 kW Diesel Emergency Generator</td>
</tr>
<tr>
<td>C8</td>
<td>202 kW Portable Diesel Emergency Generator; 13.3 GPH</td>
</tr>
<tr>
<td>C5 NG Heaters</td>
<td>Comfort NG Heaters, Total Rated Capacity; 0.35 MMBtu/hr</td>
</tr>
</tbody>
</table>

*Insignificant Activities Equipment are at various locations and several USDA addresses.*
II. Plant-Wide Conditions

Facility Name: National Centers for Animal Health
Permit Number: 02-TV-001R3

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: September 26, 2019
Ending on: September 25, 2024

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 (SO₂): 500 parts per million by volume
Authority for Requirement: 567 IAC 23.3(3)"e"

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

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

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

Authority for Requirement: 567 IAC 23.3(2)“c"
III. Emission Point-Specific Conditions

Facility Name: National Centers for Animal Health
Permit Number: 02-TV-001R3

Emission Point ID Number: S-4 and S-5

Associated Equipment

Associated Emission Unit ID Numbers: EU S-4, EU S-5
Emissions Control Equipment ID Numbers: CE-S-4, CE-S-5
Emissions Control Equipment Description: Afterburner, rated at 5.0 MMBTU/hr (CE-S-4) & Afterburner, rated at 5.0 MMBTU/hr (CE-S-5)

Emission Unit vented through this Emission Point: S-4
Emission Unit Description: Incinerator #4
Raw Material/Fuel: Natural Gas
Rated Capacity: 440 lb/hr of waste charge rate

Emission Unit vented through this Emission Point: S-5
Emission Unit Description: Incinerator #5
Raw Material/Fuel: Natural Gas
Rated Capacity: 500 lb/hr of waste charge rate

Applicable Requirements

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

Emission Limits for both S-4 & S-5:

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permits 92-A-045-S7 & 95-A-001-S5

(1) An exceedance of the indicator opacity of 25% will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing). Visible air contaminants in excess of 40% but less than or equal to 60% opacity may be emitted for a period aggregating not more than 3 minutes in any 60 minute period during an operation breakdown or during the cleaning of air pollution control equipment.

Pollutant: Sulfur Dioxide
Emission Limit(s): 500 ppmv
Authority for Requirement: 567 IAC 23.3(3)"e"
DNR Construction Permit 92-A-045-S7 & 95-A-001-S5
Emission Limits for S-4:

Pollutant: PM-10
Emission Limit(s): 1.7 lb/hr
Authority for Requirement: DNR Construction Permit 92-A-045-S7

Pollutant: Particulate Matter
Emission Limit(s): 1.7 lb/hr, 0.35 gr/dscf
Authority for Requirement: 567 IAC 23.4(12)"a"
DNR Construction Permit 92-A-045-S7

Pollutant: Nitrogen Oxides
Emission Limit(s): 2.18 lb/hr
Authority for Requirement: DNR Construction Permit 92-A-045-S7

Emission Limits for S-5:

Pollutant: PM-10
Emission Limit(s): 1.2 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-001-S5

Pollutant: Particulate Matter
Emission Limit(s): 1.2 lb/hr, 0.35 gr/dscf
Authority for Requirement: 567 IAC 23.4(12)"a"
DNR Construction Permit 95-A-001-S5

Pollutant: Nitrogen Oxides
Emission Limit(s): 1.38 lb/hr
Authority for Requirement: DNR Construction Permit 95-A-001-S5

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

Operating Requirements and Associated Recordkeeping

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

A. Each emission unit (EU S-4 and EU S-5) shall be fired by natural gas only.

B. The amount of waste charged into emission units (EU S-4 and EU S-5) shall not exceed each unit’s rated capacity (lbs/hr).

i. The owner or operator shall maintain records on the amount of waste charged into the emission units (EU S-4 and EU S-5). For each unit, the records shall be on a pounds per hour basis.
C. The waste burned in each emission unit (EU S-4 and EU S-5) shall be limited to pathological waste, low-level radioactive waste, chemotherapeutic waste, and hospital and medical/infectious waste. Pathological waste is waste material consisting of only human or animal remain, anatomical parts, and/or tissue, and the bags/containers used to collect and transport the waste material and animal bedding. Low-level radioactive waste and chemotherapeutic waste are defined in §60.3078. Hospital waste and medical/infectious waste (HMIW) are defined in §60.51c. Because the rated capacity of each emission unit (EU S-4 and EU S-5) is based on burning pathological waste, whenever HMIW is incinerated in the unit, it shall be incinerated at the same time that pathological waste is being incinerated. Prior to burning other types of waste in these emission units (EU S-4 and EU S-5), the owner or operator shall notify the Iowa DNR - Air Quality Bureau.

   i. The owner or operator shall maintain records on the identification of the types of waste charged into each emission unit (EU S-4 and EU S-5).

D. Each incinerator (EU S-4 and EU S-5) shall be operated only by personnel who have been properly trained.

E. Each emission unit (EU S-4 and EU S-5) is a co-fired combustor as defined in §60.51c, and, accordingly, each unit is restricted to burning a maximum of 10% hospital waste and medical/infectious waste by weight of all waste combusted on a calendar quarter basis. By definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are not considered hospital waste or medical/infectious waste.

   i. The owner or operator shall maintain the following records on a calendar quarterly basis for each emission unit (EU S-4 and EU S-5):

      a. The amount of hospital waste and medical/infectious waste burned (pounds);
      b. The total amount of waste burned (pounds); and
      c. The percentage of hospital waste and medical/infectious waste burned.

F. The combined operating time of emission units (EU S-4 and EU S-5) shall not exceed 6500 hours in any rolling twelve-month period. The owner or operator shall use a non-resettable hour meter to monitor the operating hours of each emission unit (EU S-4 and EU S-5).

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

      a. The number of hours that emission unit EU S-4 operated;
      b. The number of hours that emission unit EU S-5 operated;
      c. The combined number of hours that emission units EU S-4 and EU S-5 operated; and
      d. The rolling 12-month total number of hours that emission units EU S-4 and EU S-5 operated combined.
G. Each incinerator (EU S-4 and EU S-5) shall be equipped with an interlock system to prevent charging waste material until the secondary combustion chamber temperature has reached a minimum temperature of 1600°F and the primary combustion chamber has reached a minimum temperature of 1400°F.

i. The owner or operator shall have equipment that monitors and records the temperature in the primary combustion chamber for each incinerator.

ii. The owner or operator shall have equipment that monitors and records the temperature in the secondary combustion chamber continuously for each incinerator.

H. The afterburner for each incinerator shall remain on and maintain a minimum temperature of 1550°F until the waste material has burned down completely.

I. The owner or operator shall follow its written standard operating procedures for each emission unit (EU S-4 and EU S-5).

J. The owner or operator shall maintain the records required by its standard operating procedures for each emission unit (EU S-4 and EU S-5).


**Emission Point Characteristics**

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

The emission points shall conform to the specifications listed below:

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-4</td>
<td>53.3</td>
<td>Vertical, Unobstructed</td>
<td>34.4</td>
<td>926</td>
<td>2,700</td>
</tr>
<tr>
<td>S-5</td>
<td>46</td>
<td>Vertical, Unobstructed</td>
<td>24</td>
<td>1,200</td>
<td>1,700</td>
</tr>
</tbody>
</table>


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

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

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

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

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

Emission Unit vented through this Emission Point:  S-6
Emission Unit Description:  Paraformaldehyde vents
Raw Material/Fuel:  SunPac Mildewcide
Rated Capacity:  0.114 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.*

No applicable limits 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)

**Associated Equipment**

**Associated Emission Unit ID Numbers:** See Table Below

<table>
<thead>
<tr>
<th>EU#</th>
<th>Emission Unit Description</th>
<th>Maximum Design Capacity</th>
<th>CE#</th>
<th>Control Equipment Description</th>
<th>Construction Permit #</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-10</td>
<td>Boiler #1 – Cleaver Brooks, Model CB800</td>
<td>33.48 MMBtu/hr Natural Gas and 239 gal/hr Fuel Oil</td>
<td>NA</td>
<td>None</td>
<td>01-A-843-S5</td>
</tr>
<tr>
<td>S-11</td>
<td>Boiler #2 – Cleaver Brooks, Model CB800</td>
<td>33.48 MMBtu/hr Natural Gas and 239 gal/hr Fuel Oil</td>
<td>NA</td>
<td>None</td>
<td>01-A-844-S5</td>
</tr>
<tr>
<td>S-1C</td>
<td>Boiler #3 – Murray</td>
<td>45.0 MMBtu/hr Natural Gas and 321.4 gal/hr Fuel Oil</td>
<td>CE S-1C</td>
<td>Low NOx Burner</td>
<td>05-A-290-S4</td>
</tr>
<tr>
<td>S-20</td>
<td>Boiler #4 – Cleaver Brooks</td>
<td>45.1 MMBtu/hr Natural Gas and 309 gal/hr Fuel Oil</td>
<td>CE S-20</td>
<td>Low NOx Burner</td>
<td>19-A-167</td>
</tr>
<tr>
<td>S-15</td>
<td>Boiler #5 – Nebraska</td>
<td>45.0 MMBtu/hr Natural Gas and 321.4 gal/hr Fuel Oil</td>
<td>NA</td>
<td>None</td>
<td>06-A-113-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.*

**Emission Limits for S-10 & S-11:**

Pollutant: Opacity  
Emission Limit(s): 20%, 40%  
Authority for Requirement: 567 IAC 23.1(2)"lll"  
567 IAC 23.3(2)"d"  
DNR Construction Permits 01-A-843-S5, 01-A-844-S5

(1) When burning fuel oil, the opacity limit is 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity. When burning natural gas, the opacity limit is 40%. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).
Pollutant: PM-10
Emission Limit(s): 0.61 lb/hr
Authority for Requirement: DNR Construction Permits 01-A-843-S5, 01-A-844-S5

Pollutant: Particulate Matter
Emission Limit(s): 0.84 lb/hr, 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
DNR Construction Permit 01-A-843-S5, 01-A-844-S5

Pollutant: Sulfur Dioxide (SO₂)
Emission Limit(s): Natural Gas: 500 ppm, 0.0006 lb/MMBTU heat input
Fuel Oil: 0.051 lb/MMBTU
Authority for Requirement: 567 IAC 23.3(3)"e"
DNR Construction Permits 01-A-843-S5, 01-A-844-S5

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): Natural Gas: 0.108 lb/MMBtu heat input
Fuel Oil: 0.158 lb/MMBtu
Authority for Requirement: DNR Construction Permits 01-A-843-S5, 01-A-844-S5

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.084 lb/MMBtu
Authority for Requirement: DNR Construction Permits 01-A-843-S5, 01-A-844-S5

Emission Limits for S-1C, S-20 & S-15:

Pollutant: Opacity
Emission Limit(s): 20%, 40% (2)
Authority for Requirement: 567 IAC 23.1(2)"Ill"
567 IAC 23.3(2)"d"

(2) When burning fuel oil, the opacity limit is 20% opacity as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity. When burning natural gas, the opacity limit is 40%. An exceedance of the indicator opacity of "No Visible Emissions" will require the owner or operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the exceedance. If exceedances continue after the corrections, the Department may require additional proof to demonstrate compliance (e.g., stack testing).

Pollutant: PM-10
Emission Limit(s): 0.99 lb/hr

Pollutant: Particulate Matter
Emission Limit(s): 1.41 lb/hr, 0.6 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(2)"b"
Pollutant: Sulfur Dioxide (SO$_2$)
Emission Limit(s): Natural Gas: 500 ppmv, 0.0006 lb/MMBTU heat input
  Fuel Oil: 0.051 lb/MMBTU
Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Nitrogen Oxides (NOx)
Emission Limit(s): Natural Gas: 0.075 lb/MMBtu heat input
  Fuel Oil: 0.158 lb/MMBtu

Pollutant: Carbon Monoxide (CO)
Emission Limit(s): 0.084 lb/MMBtu

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

**New Source Performance Standards (NSPS):**
The following subparts apply to the emission unit(s) in these permits:

<table>
<thead>
<tr>
<th>EU ID</th>
<th>Subpart</th>
<th>Title</th>
<th>Type</th>
<th>State Reference (567 IAC)</th>
<th>Federal Reference (40 CFR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-10</td>
<td>A</td>
<td>General Conditions</td>
<td>NA</td>
<td>23.1(2)</td>
<td>§60.1 – §60.19</td>
</tr>
<tr>
<td>S-11</td>
<td>A</td>
<td>Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units (1)</td>
<td>Natural Gas and Fuel Oil</td>
<td>23.1(2)&quot;III&quot;</td>
<td>§60.40c – §60.48c</td>
</tr>
<tr>
<td>S-20</td>
<td>Dc</td>
<td>Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units (1)</td>
<td>Natural Gas and Fuel Oil</td>
<td>23.1(2)&quot;III&quot;</td>
<td>§60.40c – §60.48c</td>
</tr>
<tr>
<td>S-15</td>
<td>Dc</td>
<td>Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units (1)</td>
<td>Natural Gas and Fuel Oil</td>
<td>23.1(2)&quot;III&quot;</td>
<td>§60.40c – §60.48c</td>
</tr>
</tbody>
</table>

(1) At the current time, the Department has adopted amendments as published through January 20, 2011 to NSPS Subparts D, Da, Db, and Dc. Hence, the amendments published on February 16, 2012 and February 27, 2014 have not been adopted and, thus, are not administered by the State of Iowa. A company that is subject to these rules must comply with the amendments, but the State of Iowa does not enforce them (EPA does).

(2) Boiler 3 (EP-S-1C) is of the source type subject to the requirements/conditions of NSPS Subpart A – General Provisions and NSPS Subpart Dc – Standards of Performance for Small Industrial-Commercial Institutional Steam Generating Units as specified in 40 CFR Part 60 §60.40c(a) [567 IAC 23.1(2)"III"]). This emission unit; however, was constructed (1965) prior to the applicability date of this subpart; therefore this boiler is not subject to the requirements of NSPS Subpart Dc.


**National Emission Standards for Hazardous Air Pollutants (NESHAP):**
The following subparts apply to the emission unit(s) in these permits:

These boilers are of the source type: National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial and Institutional Boilers [40 CFR Part 63 Subpart JJJJJJJ] as a new source, because the boiler was "constructed" after June 4, 2010. In accordance
with 40 CFR §63.11195(e), these boilers are not subject to the rule at this time. They only burn natural gas, thus they are gas-fired boilers as defined in 40 CFR §63.11237. However, as specified in 40 CFR §63.11237, if any of the boilers combust fuel oil exceeding 48 hours in any calendar year, then that boiler will become subject to the rule. The 48 hours of burning fuel oil includes a combined total of periodic testing, maintenance, or operator training, but excludes periods of gas curtailment, gas supply interruption, and startups.

**Operating Requirements and Associated Recordkeeping**

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

A. EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15 are limited to firing on natural gas and fuel oil #1 or #2. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.

B. Per 40 CFR §60.48c(g)(1), the owner or operator shall record and maintain records of the amount of each fuel combusted during each operating day for boilers EU-S-10, EU-S-11, EU-S-20, and EU-S-15. As an alternative to this requirement per 40 CFR §60.48c(g)(2) and 40 CFR §60.48c(g)(3), the owner or operator may elect to either. Per the facilities request, EU-S-1C will following the same requirements as the other boilers (EU-S-10, EU-S-11, EU-S-20, and EU-S-15).

   (1) record and maintain records of the amount of each fuel combusted during each calendar month [See 40 CFR §60.48c(g)(2)] or record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month [See 40 CFR §60.48c(g)(3)].

C. Per 40 CFR §60.48c(b) The owner or operator of each affected facility subject to the SO\(_2\) emission limits of §60.42c, or the PM or opacity limits of §60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

D. The sulfur content of the oil burned in the boilers (EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15) shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.

E. In accordance with 40 CFR §60.44c(h), compliance with the fuel oil sulfur limit shall be based on fuel supplier certification. The fuel supplier certification shall contain all the information required in 40 CFR §60.48c(f)(1):

   (1) The name of the oil supplier;

   (2) A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in §60.41c;
(3) The sulfur content or maximum sulfur content of the oil.

F. The annual heat input to emission units EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15, combined, shall not exceed 760,000 MMBtu in any rolling 12-month period.

G. The total amount of fuel oil burned in emission units EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15, combined, shall not exceed 716,571 gallons in any rolling 12-month period.

H. The owner or operator shall maintain the following monthly records:
   (1) the total amount of fuel oil burned in the emissions unit (gallons);
   (2) the heat content of the fuel oil burned (Btu/gallons);
   (3) the rolling 12-month total amount of fuel oil burned in the emissions unit (gallons);
   (4) the rolling 12-month total amount of fuel oil burned in emissions units EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15;
   (5) the total amount of natural gas burned in the emissions unit (standard cubic feet);
   (6) the heat input to the emissions unit; the heat input shall be calculated by using the following equation:
      i. \( HI = \left[ \frac{\text{VOLoil} \times \text{HCoil} }{10^6 \text{ Btu} } + \frac{\text{VOLng} \times \text{HCng} }{10^6 \text{ Btu} } \right] \)
      ii. Where:
         iii. \( HI \) = heat input to the emissions unit (MMBtu)
         iv. \( \text{VOLoil} \) = amount of oil burned in the emissions unit (gallons)
         v. \( \text{HCoil} \) = heat content of oil, Btu/gallon
         vi. \( \text{VOLng} \) = amount of natural gas burned in the emissions unit (standard cubic feet)
      vii. \( \text{HCng} \) = heat content of natural gas, Btu/scf; and
   (7) the rolling 12-month total heat input to emissions units EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15 (MMBtu).

I. The permittee shall maintain records required by its standard operating procedures.

J. The owner or operator shall operate the boilers (EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15) according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected boilers indicative of compliance with the opacity standard.

K. When burning fuel oil, the permittee shall keep records as required by 40 CFR §60.48c(e)(11) and submit reports semi-annually as required by 40 CFR §60.48c(d) and 40 CFR §60.48c(e). The report shall include a copy of the fuel oil certification showing that the oil is meeting the applicable sulfur content and a certified statement by the owner or operator that the records of fuel oil suppliers certification represent all fuel oil burned during the period. All reports should be postmarked by the 30th day following the end of the reporting period.

L. The owner or operator shall track the number of hours Boilers EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15 combusts fuel oil on a calendar year basis and the reason fuel oil was
used. If any of the boilers exceed 48 hours in any calendar year, then that boiler will become subject to the NESHAP subpart JJJJJJ. The 48 hours of burning fuel oil includes a combined total of periodic testing, maintenance, or operator training, but excludes periods of gas curtailment, gas supply interruption, and startups.

(1) If the total hours of Boilers EU-S-10, EU-S-11, EU-S-1C, EU-S-20, and EU-S-15 exceed 48 hours in any calendar year, the facility shall notify the Iowa DNR and comply with all applicable requirements in NESHAP subpart JJJJJJ.

Authority for Requirement: 40 CFR 63, Subpart JJJJJJ
DNR Construction Permits 01-A-843-S5, 01-A-844-S5,

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

The emission points shall conform to the specifications listed below:

<table>
<thead>
<tr>
<th>EP ID</th>
<th>Stack Height, Feet</th>
<th>Discharge Style</th>
<th>Stack Opening, inches</th>
<th>Stack Temperature, °F</th>
<th>Exhaust Flowrate, SCFM</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-S-10</td>
<td>46</td>
<td>Vertical, Obstructed</td>
<td>24</td>
<td>350</td>
<td>6,550</td>
</tr>
<tr>
<td>EP-S-11</td>
<td>46</td>
<td>Vertical, Obstructed</td>
<td>24</td>
<td>350</td>
<td>6,550</td>
</tr>
<tr>
<td>EP-S-1C</td>
<td>46</td>
<td>Vertical, Unobstructed</td>
<td>34</td>
<td>393</td>
<td>6,725</td>
</tr>
<tr>
<td>EP-S-20</td>
<td>46</td>
<td>Vertical, Unobstructed</td>
<td>32</td>
<td>459</td>
<td>19,090</td>
</tr>
<tr>
<td>EP-S-15</td>
<td>45</td>
<td>Vertical, Unobstructed</td>
<td>36</td>
<td>400</td>
<td>10,000</td>
</tr>
</tbody>
</table>

Authority for Requirement: DNR Construction Permits 01-A-843-S5, 01-A-844-S5,

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

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

**Compliance Demonstration(s)**

<table>
<thead>
<tr>
<th>EP</th>
<th>Pollutant</th>
<th>Compliance Methodology</th>
<th>Frequency</th>
<th>Test Run Time</th>
<th>Test Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP-S-10</td>
<td>Opacity</td>
<td>Performance Test (1)</td>
<td>See Note (2)</td>
<td>1 hour</td>
<td>40 CFR 60, Appendix A, Method 9</td>
</tr>
<tr>
<td>EP-S-11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-S-1C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-S-20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP-S-15</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1) NSPS Subpart Dc requires an opacity test when the unit combusts fuel oil. No test is required if the unit burns only natural gas. Testing to be conducted in accordance with §60.8.

(2) Per §60.47c(a) initial test is required within 45 days of using fuel oil. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation. Subsequent tests will be conducted in accordance with §60.47c (a)(1), (a)(2) or (a)(3).

Agency Approved Operation & Maintenance Plan Required?  Yes  No  ☒

Facility Maintained Operation & Maintenance Plan Required?  Yes  No  ☒

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

Authority for Requirement:  567 IAC 22.108(3)
Emission Point ID Number: S-13, S-14

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Raw Material/Fuel</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-13</td>
<td>S-13</td>
<td>2000 kW Emergency Generator #4</td>
<td>#2 Fuel Oil</td>
<td>140.2 gal/hr</td>
<td>05-A-276-S3</td>
</tr>
<tr>
<td>S-14</td>
<td>S-14</td>
<td>2000 kW Emergency Generator #1</td>
<td>#2 Fuel Oil</td>
<td>140.2 gal/hr</td>
<td>05-A-277-S3</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Opacity</th>
<th>PM</th>
<th>PM-10</th>
<th>Sulfur Dioxide</th>
<th>Nitrogen Oxides</th>
<th>Carbon Monoxide</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-13</td>
<td>40%(1)</td>
<td>2.76 lb/hr</td>
<td>2.6 lb/hr</td>
<td>1.0 lb/hr</td>
<td>41.71 lb/hr</td>
<td>16.69 lb/hr</td>
<td>05-A-276-S3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.11 tpy</td>
<td>4.11 tpy</td>
<td></td>
<td>63.10 tpy</td>
<td>24.98 tpy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>S-14</td>
<td>40%(1)</td>
<td>2.76 lb/hr</td>
<td>2.6 lb/hr</td>
<td>1.0 lb/hr</td>
<td>41.71 lb/hr</td>
<td>16.69 lb/hr</td>
<td>05-A-277-S3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.11 tpy</td>
<td>4.11 tpy</td>
<td></td>
<td>63.10 tpy</td>
<td>24.98 tpy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td></td>
<td>(2)</td>
<td>(2)</td>
<td></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 a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.

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

Operating Limits for each of the two engines:
A. Emissions units S-13, S-14, S-17, S-18, and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
B. The engine shall combust only #1 or #2 diesel fuel oil. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this
permit.
C. The sulfur content of the oil burned in this unit shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.

Reporting & Recordkeeping Requirements for each of the two engines:
The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.
A. The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.
B. The permittee shall keep the following monthly records:
   i. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19.
   ii. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.
Authority for Requirement: DNR Construction Permits: 05-A-276-S3 and 05-A-277-S3

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

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 5,980 scfm
Exhaust Temperature (°F): 958 degrees
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permits: 05-A-276-S3 and 05-A-277-S3

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number:  S-16, S-16A (Bypass Stack)

Emission Unit vented through this Emission Point:  S-16
Emission Unit Description:  3.5 MW Combustion Turbine with 21.9 MMBTU/hr Heat Recovery Steam Generator (HRSG)
Raw Material/Fuel:  Natural gas
Rated Capacity:  Turbine: 45.72 MMBTU/hr
                                   Max to HRSG #2 from turbine: 21.9 MMBTU/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s):  40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
                                   DNR Construction Permit 06-A-1149-S2
                                   DNR Construction Permit 06-A-1308-S2

Pollutant: PM-10
Emission Limit(s):  1.9 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-1149-S2,
                                   DNR Construction Permit 06-A-1308-S2

Pollutant: Particulate Matter
Emission Limit(s):  1.9 lb/hr, 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
                                   DNR Construction Permit 06-A-1149-S2
                                   DNR Construction Permit 06-A-1308-S2

Pollutant: Sulfur Dioxide
Emission Limit(s):  2.74 lb/hr, 0.06 lb/MMBTU
Authority for Requirement: 567 IAC 23.1(2)"aaaa",
                                   DNR Construction Permit 06-A-1149-S2
                                   DNR Construction Permit 06-A-1308-S2

Pollutant: Nitrogen Oxides
Emission Limit(s):  6.9 lb/hr, 30.22 tpy (2), 42 ppm @ 15% O₂ or 2.3 lb/MWh
Authority for Requirement: 567 IAC 23.1(2)"aaaa"
                                   DNR Construction Permit 06-A-1149-S2
                                   DNR Construction Permit 06-A-1308-S2
Pollutant: Carbon Monoxide
Emission Limit(s): 5.0 lb/hr
Authority for Requirement: DNR Construction Permit 06-A-1149-S2
DNR Construction Permit 06-A-1308-S2

(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) Annual NOx emissions from EP S-16 and EP S-16A shall not exceed 30.22 tons in any rolling 12-month period.

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

Operating Limits
Operating limits for this emission unit shall be:
A. The exhaust gas from the turbine is passed through a heat recovery boiler. The boiler is not equipped with an auxiliary burner. The maximum heat input to the boiler is 21.9 MMBTU/hr.
B. The emissions unit is limited to burning natural gas only. The sulfur content of the natural gas must not exceed a limit of 20 grains of sulfur per 100 standard cubic feet of gas in order to not exceed the sulfur dioxide limit of 0.06 lb/MMBTU heat input.
C. In accordance with continuous compliance requirements of §60.4340, the permittee must conduct an annual performance test for NOx. If the NOx emission results from the performance test is less than or equal to 75 percent of the NOx emission limit for the unit, the permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOx emission limit for the turbine, the permittee must resume annual performance tests.

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

A. In accordance with §60.4360 and §60.4365, the permittee is not required to monitor the total sulfur content of the natural gas being fired in the turbine provided that it can show that potential sulfur dioxide emissions do not exceed 0.06 lb/MMBTU heat input. One of the following sources of information must be used to demonstrate this:
   i. The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for natural gas is 20 grains of sulfur or less per 100 standard cubic feet and has potential sulfur dioxide emissions of less than 0.060 lb/MMBTU heat input; or
   ii. Representative fuel sampling data, which show that the sulfur content of the natural gas does not exceed 0.060 lb/MMBTU heat input. At a minimum, the amount of fuel
sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to 40 CFR Part 75 is required.

B. In accordance with §60.4375(b), the permittee shall submit a written report to the Iowa DNR - Air Quality Bureau of the results of each NOx performance test no later than 60 days after the completion of the performance test.

Authority for Requirement: DNR Construction Permit 06-A-1149-S2
DNR Construction Permit 06-A-1308-S2

**NSPS Requirements**

This emission unit is subject to the requirements of 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines (567 IAC 23.1(2)"aaaa"). The heat input to the turbine at peak load is 45.72 MMBTU/hr.

Authority for Requirement: 567 IAC 23.1(2)"aaaa", 40 CFR 60 Subpart KKKK,
DNR Construction Permit 06-A-1149-S2,
DNR Construction Permit 06-A-1308-S2

**Emission Point Characteristics**

*These emission points shall conform to the specifications listed below.*

- **Stack Height**, (ft, from the ground): 45 feet
- **Stack Opening**, (inches, dia.): 41.5 inches (S-16)  
  40.75 inches (S-16A)
- **Exhaust Flow Rate** (scfm): 36,458 scfm (S-16) 
  31,424 scfm (S-16A)
- **Exhaust Temperature** (°F): 341 degrees (S-16) 
  820 degrees (S-16A)
- **Discharge Style**: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 06-A-1149-S2
DNR Construction Permit 06-A-1308-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 characteristics above are different than the values stated, the owner or operator shall submit a request either by electronic mail or written correspondence to the Department within thirty (30) days of the discovery to determine if a permit amendment is required, or submit a permit application requesting to amend the permit.
**Monitoring Requirements**

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

**Stack Testing:**

Pollutant - NOx
Stack Test to be Completed – Annually
Test Method - 40 CFR 60, Appendix A, Method 7E
Authority for Requirement - DNR Construction Permit 06-A-1149-S2
DNR Construction Permit 06-A-1308-S2

(1) In accordance with § 60.4400, subsequent NOx performance tests shall be conducted on an annual basis, no more than 14 calendar months following the previous performance test. See also §63.4340(a) and Condition C of the Operating Limits section above for testing frequency.

The turbine is equipped with two exhausts: one through the heat recovery steam generator (HRSG), and one through a stack that bypasses the HRSG. If all of the emissions can be vented through one of the two stacks during a performance test, it is only necessary to test one of the two stacks.

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 [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: S-17 and S-18

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Emission Unit</th>
<th>Emission Unit Description</th>
<th>Raw Material</th>
<th>Rated Capacity</th>
<th>Construction Permit</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-17</td>
<td>S-17</td>
<td>2000 kW Emergency Generator #5</td>
<td>#2 Fuel Oil</td>
<td>140.2 gal/hr</td>
<td>06-A-1150-S2</td>
</tr>
<tr>
<td>S-18</td>
<td>S-18</td>
<td>2000 kW Emergency Generator #2</td>
<td>#2 Fuel Oil</td>
<td>140.2 gal/hr</td>
<td>06-A-1151-S2</td>
</tr>
</tbody>
</table>

**Applicable Requirements**

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

<table>
<thead>
<tr>
<th>Emission Point</th>
<th>Opacity</th>
<th>PM</th>
<th>PM-10</th>
<th>Sulfur Dioxide</th>
<th>Nitrogen Oxides</th>
<th>Carbon Monoxide</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>567 IAC</td>
<td>23.3(2) &quot;d&quot;</td>
<td>23.3(2) &quot;a&quot;</td>
<td>0.0 lb/hr</td>
<td>41.71 lb/hr</td>
<td>16.69 lb/hr</td>
<td>06-A-1150-S2</td>
</tr>
<tr>
<td>S-17</td>
<td>40% (1)</td>
<td>2.76 lb/hr</td>
<td>2.76 lb/hr</td>
<td>1.0 lb/hr</td>
<td>63.10 tpy (2)</td>
<td>24.98 tpy (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.11 tpy (2)</td>
<td>4.11 tpy (2)</td>
<td></td>
<td>0.30 lb/gal</td>
<td>0.15 lb/gal</td>
<td></td>
</tr>
<tr>
<td>S-18</td>
<td>40% (1)</td>
<td>2.76 lb/hr</td>
<td>2.76 lb/hr</td>
<td>1.0 lb/hr</td>
<td>41.71 lb/hr</td>
<td>16.69 lb/hr</td>
<td>06-A-1151-S2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.11 tpy (2)</td>
<td>4.11 tpy (2)</td>
<td></td>
<td>63.10 tpy (2)</td>
<td>24.98 tpy (2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.30 lb/gal</td>
<td>0.15 lb/gal</td>
<td></td>
<td></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 a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.

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

Operating Limits for the engines:
A. This engine is limited to burning diesel fuel oil only.
B. Emissions units S-13, S-14, S-17, S-18 and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
C. This engine is limited to operating for emergency situations and required testing and
maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.

D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
   i. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

Note: Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted (40 CFR 60.4207(b)).

E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.

F. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer’s written instructions or procedures developed by the owner or operator that are approved by the manufacturer. The owner or operator may only change engine settings that are permitted by the manufacturer.

Reporting & Recordkeeping Requirements for each of the two engines:
The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.

A. The owner or operator shall maintain the following monthly records:
   i. the total number of hours that the engine operated;
   ii. the number of hours that the engine operated for maintenance checks and readiness testing; and
   iii. the rolling 12-month total amount of the number of hours that the engine operated.
   iv. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19, and
   v. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.

B. The owner or operator shall maintain an annual record of the number of hours that the engine operated for maintenance checks and readiness testing.

C. The owner or operator of the engine shall keep any records required to demonstrate compliance with the emission standards in §60.4205 (a), as required by §60.4211 (b).

D. The owner or operator of the engine shall comply with the requirements of condition (D) of the Operation Limits listed above by one of the following methods:
   i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
   ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
   iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

NSPS and NESHAP Requirements for each of the two engines

A. These engines are subject to 40 CFR Part 60 NSPS Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IAC 23.1(2)“yyy”). The engines are emergency stationary internal combustion engines that are not fire pump engines.
   i. The engines must comply with the emissions standards from §60.4205 (a). The emission standards that the engines must meet are:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Standard</th>
<th>Authority for Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (PM)</td>
<td>0.54 grams/kW-hr</td>
<td>40 CFR Part 60</td>
</tr>
<tr>
<td>HC</td>
<td>1.3 grams/kW-hr</td>
<td>NSPS Subpart IIII, Table 1</td>
</tr>
<tr>
<td>NOx</td>
<td>9.2 grams/kW-hr</td>
<td>40 CFR Part 63</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>11.4 grams/kW-hr</td>
<td>DNR Construction Permits: 06-A-1150-S2 and 06-A-1151-S2</td>
</tr>
</tbody>
</table>

Hydrocarbons

   ii. This engines must demonstrate compliance according to one of the methods specified in §60.4211 (b).

B. The engines are subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (567 IAC 23.1(4)“cz”, 40 CFR Part 63, Subpart ZZZZ). The engines are new reciprocating internal combustion engines (RICE). In accordance with §63.6590 (c), the engines must comply with the requirements of Subpart ZZZZ by meeting the requirements of NSPS subpart III.

Authority for Requirement: 567 IAC 23.1(2)“yyy”, 40 CFR 60 Subpart IIII,
567 IAC 23.1(4)“cz”, 40 CFR 63, Subpart ZZZZ,
DNR Construction Permits: 06-A-1150-S2 and 06-A-1151-S2

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

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 5,980 scfm
Exhaust Temperature (°F): 958 degrees
Discharge Style: Vertical, unobstructed


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

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

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

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

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

Emission Unit vented through this Emission Point: S-19  
Emission Unit Description: 2000 kW Emergency Generator #6 (Caterpillar IC Diesel Engine)  
Raw Material/Fuel: Fuel Oil  
Rated Capacity: 138.90 gallons/hr

**Applicable Requirements**

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

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

Pollutant: Opacity  
Emission Limit(s): 40% (1)  
Authority for Requirement: 567 IAC 23.3(2)"d", 567 IAC 23.1(2)"yyy",  
DNR Construction Permit 11-A-091

Pollutant: Particulate Matter  
Emission Limit(s): 2.76 lb/hr, 4.11 tons/yr (2)  
Authority for Requirement: 567 IAC 23.3(2)"a", 567 IAC 23.1(2)"yyy",  
DNR Construction Permit 11-A-091

Pollutant: PM-10  
Emission Limit(s): 2.76 lb/hr, 4.11 tons/yr (2)  
Authority for Requirement: DNR Construction Permit 11-A-091

Pollutant: Nitrogen Oxides  
Emission Limit(s): 41.71 lb/hr, 63.10 tons/yr (2), 0.30 lb/gal  
Authority for Requirement: DNR Construction Permit 11-A-091

Pollutant: Carbon Monoxide  
Emission Limit(s): 16.69 lb/hr, 24.98 tons/yr (2), 0.15 lb/gal  
Authority for Requirement: DNR Construction Permit 11-A-091

(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 a 12-month rolling total, based on operating limits. The annual limit is a combined limit for emission units S-13, S-14, S-17, S-18, and S-19.
Operational Limits & Requirements
The owner/operator of this equipment shall comply with the operational limits and requirements listed below.

Operating Limits

Operating limits for this emission unit shall be:
A. This engine is limited to burning diesel fuel oil only.
B. Emissions units S-13, S-14, S-17, S-18 and S-19 shall not burn more than 419,280 gallons of diesel fuel oil in any rolling 12-month period.
C. This engine is limited to operating for emergency situations and required testing and maintenance. In accordance with §60.4211(e), the engine is limited to operating a maximum of 100 hours per year for maintenance checks and readiness testing. This engine is not allowed to operate as a peak shaving unit.
D. In accordance with §60.4207(b), the diesel fuel oil burned in this engine shall meet the following specifications from 40 CFR 80.510(b) for nonroad diesel fuel:
   i. a maximum sulfur content of 15 ppm (0.0015%) by weight; and
   ii. a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.

   Note: Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted (40 CFR 60.4207(b)).

E. In accordance with §60.4209(a), the engine shall be equipped with a non-resettable hour meter.
F. In accordance with §60.4211(a), this engine shall be operated and maintained in accordance with the manufacturer’s written instructions or procedures developed by the owner or operator that are approved by the manufacturer. The owner or operator may only change engine settings that are permitted by the manufacturer.

Reporting & Recordkeeping

The following records shall be maintained on-site for five (5) years and shall be available for inspection upon request by a representative of the Department of Natural Resources.
A. The owner or operator shall maintain the following monthly records:
   i. the total number of hours that the engine operated;
   ii. the number of hours that the engine operated for maintenance checks and readiness testing; and
   iii. the rolling 12-month total amount of the number of hours that the engine operated.
   iv. the total amount of diesel fuel oil burned in emissions units S-13, S-14, S-17, S-18, and S-19, and
   v. the rolling, 12-month total of the amount of diesel fuel oil burned in emissions unit S-13, S-14, S-17, S-18, and S-19.
B. The owner or operator shall maintain an annual record of the number of hours that the engine
operated for maintenance checks and readiness testing.

C. The owner or operator of the engine shall comply with the requirements of condition (D) of the Operation Limits section listed above by one of the following methods:
   i. have the fuel supplier certify that the fuel delivered meets the definition of non-road diesel fuel as defined in 40 CFR 80.510(b);
   ii. obtain a fuel analysis from the supplier showing the sulfur content and cetane index or aromatic content of the fuel delivered; or
   iii. perform an analysis of the fuel to determine the sulfur content and cetane index or aromatic content of the fuel received.

Authority for Requirement:  DNR Construction Permit 11-A-091

NSPS and NESHAP Requirements

A. This engine is subject to 40 CFR Part 60 NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (IAC 23.1(2)"yyy"). The engine is an emergency stationary internal combustion engine that is not a fire pump engine.
   i. In accordance with §60.4211(c), the engine must be certified by its manufacturer to comply with the emissions standards from §60.4205 (b) and §60.4202 (a)(2). The emission standards that the engine must be certified by the manufacturer to meet are:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emission Standard</th>
<th>Authority for Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (PM)</td>
<td>0.20 grams/kW-hr</td>
<td>§ 89.112 Table 1</td>
</tr>
<tr>
<td>NMHC1 + NOx</td>
<td>6.4 grams/kW-hr</td>
<td>§ 89.112 Table 1</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>3.5 grams/kW-hr</td>
<td>§ 89.112 Table 1</td>
</tr>
<tr>
<td>Opacity – acceleration mode</td>
<td>20%</td>
<td>§ 89.113 (a)(1)</td>
</tr>
<tr>
<td>Opacity – lugging mode</td>
<td>15%</td>
<td>§ 89.113 (a)(2)</td>
</tr>
<tr>
<td>Opacity – peaks in acceleration or lugging mode</td>
<td>50%</td>
<td>§ 89.113 (a)(3)</td>
</tr>
</tbody>
</table>

1 Non-methane hydrocarbon

   ii. In accordance with §60.4211(c), the owner or operator must comply with the required NSPS emissions standards by purchasing an engine certified by its manufacturer to meet the applicable emission standards for the same model year and engine power. The engine must be installed and configured to the manufacturer’s specifications. Provided these requirements are satisfied, no further demonstration of compliance with the emission standards from §60.4205 (b) and §60.4202 (a)(2) is required.

B. This engine is subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (567 IAC 23.1(4)"cz", 40 CFR Part 63, Subpart ZZZZ). The engine is a new reciprocating internal combustion engine (RICE). In accordance with §63.6590 (c), the engine must comply with the requirements of Subpart ZZZZ by meeting the requirements of NSPS subpart IIII.

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

Stack Height, (ft, from the ground): 35 feet
Stack Opening, (inches, dia.): 16 inches
Exhaust Flow Rate (scfm): 6,690 scfm
Exhaust Temperature (°F): 752 degrees
Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit: 11-A-091

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
Emission Point ID Number: 6K GT

Emission Unit vented through this Emission Point: 6K GT
Emission Unit Description: 6,000 Gallon Gasoline Storage Tank
Raw Material/Fuel: Gasoline
Rated Capacity: Less than 10,000 gallons/month

**Applicable Requirements**

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

None 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 monthly throughput (as defined at 40 CFR 63.11132) for this tank shall not exceed 10,000 gallons of gasoline.

Authority for Requirement: 567 IAC 22.108(14)

Reports and Recordkeeping:
The owner or operator shall keep copies of the following records on site for at least five years. These records shall be available for inspection by the Department.
1. The monthly throughput (as defined at 40 CFR 63.11132) records for this tank shall be used to demonstrate compliance with the monthly throughput limit.

Authority for Requirement: 567 IAC 22.108(3)

**NESHAP Subpart CCCCCC Requirements**

A. The owner/operator of this equipment shall comply with the requirements of 40 CFR §63.11115 and 40 CFR §63.11116.

B. The owner or operator shall meet the applicable recordkeeping and reporting standards of 40 CFR §63.11125(d) and 40 CFR §63.11126(b).

C. The owner or operator shall meet the applicable notification requirements in accordance with 40 CFR §63.11124.

Authority for Requirement: 40 CFR 63 Subpart CCCCCC
567 IAC 23.1(4)"ec"
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

Emission Unit vented through this Emission Point:  6
Emission Unit Description:  800 kW Generator
Raw Material/Fuel:  #2 Fuel Oil
Rated Capacity:  58.6 gal/hr

Applicable Requirements

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

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

Pollutant:  Opacity
Emission Limit(s):  40% (1)
Authority for Requirement:  567 IAC 23.3(2)"d"
DNR Construction Permit 03-A-1247-S1

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

Pollutant:  PM-10
Emission Limit(s):  1.4 lb/hr
Authority for Requirement:  DNR Construction Permit 03-A-1247-S1

Pollutant:  Particulate Matter
Emission Limit(s):  0.1 gr/dscf
Authority for Requirement:  567 IAC 23.3(2)"a"
DNR Construction Permit 03-A-1247-S1

Pollutant:  Sulfur Dioxide
Emission Limit(s):  0.41 lb/hr
Authority for Requirement:  DNR Construction Permit 03-A-1247-S1

Pollutant:  Nitrogen Oxides
Emission Limit(s):  26.24 lb/hr, 5.25 tpy
Authority for Requirement:  DNR Construction Permit 03-A-1247-S1
**Operational Limits & Requirements**  
*The owner/operator of this equipment shall comply with the operational limits and requirements listed below.*

**Operating Limits**

Operating limits for this emission unit shall be:
A. The engine shall not burn more than 23,440 gallons of fuel oil in any rolling 12-month period.
B. The engine shall combust only #1 or #2 fuel oil. Prior to burning any other fuels, the permittee shall submit an application to the Iowa DNR - Air Quality Bureau to modify this permit.
C. The sulfur content of the oil burned in this engine shall not exceed 0.05 percent by weight. This limit applies at all times, including periods of startup, shutdown and malfunctions.

**Reporting & Recordkeeping**

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

A. The permittee shall perform an analysis and shall maintain records on the sulfur content of each shipment of oil received. Alternatively, the permittee shall have the oil supplier provide analyses on the sulfur content of the oil received.
B. The permittee shall keep the following monthly records:
   i. the number of gallons of fuel oil burned in the engine; and
   ii. the rolling, 12-month total of the number of gallons of fuel oil burned in the engine.

Authority for Requirement: DNR Construction Permit 03-A-1247-S1

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

Stack Height, (ft, from the ground): 24 feet  
Stack Opening, (inches, dia.): 12 inches  
Exhaust Flow Rate (scfm): 2,564 scfm  
Exhaust Temperature (°F): 964 degrees  
Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 03-A-1247-S1

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

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

- Agency Approved Operation & Maintenance Plan Required? Yes [ ] No [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: MB Gen

Emission Unit vented through this Emission Point: EU-MB
Emission Unit Description: 507 kW Emergency Generator
Raw Material/Fuel: Diesel Fuel
Rated Capacity: 30.40 gal/hr

Applicable Requirements

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

Pollutant: Opacity
Emission Limit(s): 40% (1)
Authority for Requirement: 567 IAC 23.3(2)"d"
DNR Construction Permit 14-A-427-S1

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

Pollutant: Particulate Matter
Emission Limit(s): 0.1 gr/dscf
Authority for Requirement: 567 IAC 23.3(2)"a"
DNR Construction Permit 14-A-427-S1

Pollutant: Sulfur Dioxide
Emission Limit(s): 2.5 lb/MMBtu
Authority for Requirement: 567 IAC 23.3(3)"b"
DNR Construction Permit 14-A-427-S1

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

Operating Limits
Operating limits for this emission unit shall be:
A. The Diesel Emergency Engine (EU-MB) shall be restricted to operating a maximum of 500 hours in any rolling 12-month period.

B. In accordance with 567 Iowa Administrative Code 23.3(3)"b"(1), the sulfur content of the diesel fuel used by the Diesel Emergency Engine (EU-MB) shall not exceed 0.5 percent by weight. This limit applies at all times, including periods of startup, shutdown, and malfunctions.
C. The Diesel Emergency Engine (EU-MB) shall combust only diesel fuel.

**Reporting & Recordkeeping**

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

A. At the end of each month, the owner or operator shall record the number of hours that the Diesel Emergency Engine (EU-MB) operated over the previous month.

B. At the end of each month, the owner or operator shall record the total number of hours that the Diesel Emergency Engine (EU-MB) operated over the previous twelve (12) months.

C. The owner or operator shall keep records on the sulfur content of each shipment of fuel oil received. The analysis on the sulfur content of the fuel may be obtained from the supplier or may be performed by the owner or operator. The sulfur analysis does not have to be for each shipment of oil received, but shall be document by receipts from the fuel supplier, a statement from the fuel supplier on the specification of the sulfur content of the purchased fuel oil, or other supporting documentation.

D. The owner or operator shall keep records indicating the type of fuel oil burned by the Diesel Emergency Engine (EU-MB).

Authority for Requirement: DNR Construction Permit 14-A-427-S1

**Emission Point Characteristics**

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

Stack Height, (ft, from the ground): 9
Stack Opening, (inches, dia.): 4
Exhaust Flow Rate (scfm): 3,135
Exhaust Temperature (°F): 872
Discharge Style: Vertical, unobstructed

Authority for Requirement: DNR Construction Permit 14-A-427-S1

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

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

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

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

Authority for Requirement: 567 IAC 22.108(3)
IV. General Conditions
This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code chapter 22.

G1. Duty to Comply
1. The permittee must comply with all conditions of the Title V permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for a permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. 567 IAC 22.108(9)"a"
2. Any compliance schedule shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based. 567 IAC 22.105 (2)"h"(3)
3. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be enforceable by the administrator and are incorporated into this permit. 567 IAC 22.108 (1)"b"
4. Unless specified as either "state enforceable only" or "local program enforceable only", all terms and conditions in the permit, including provisions to limit a source’s potential to emit, are enforceable by the administrator and citizens under the Act. 567 IAC 22.108 (14)
5. It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. 567 IAC 22.108 (9)"b"
6. For applicable requirements with which the permittee is in compliance, the permittee shall continue to comply with such requirements. For applicable requirements that will become effective during the permit term, the permittee shall meet such requirements on a timely basis. 567 IAC 22.108(15)"c"

G2. Permit Expiration
1. Except as provided in rule 567—22.104(455B), permit expiration terminates a source’s right to operate unless a timely and complete application for renewal has been submitted in accordance with rule 567—22.105(455B). 567 IAC 22.116(2)
2. To be considered timely, the owner, operator, or designated representative (where applicable) of each source required to obtain a Title V permit shall submit on forms or electronic format specified by the Department to the Air Quality Bureau, Iowa Department of Natural Resources, Air Quality Bureau, Wallace State Office Building, 502 E 9th St., Des Moines, IA 50319-0034, two copies (three if your facility is located in Linn or Polk county) of a complete permit application, at least 6 months but not more than 18 months prior to the date of permit expiration. An additional copy must also be sent to U.S. EPA Region VII, Attention: Chief of Air Permitting & Standards Branch, 11201 Renner Blvd., Lenexa, KS 66219. Additional copies to local programs or EPA are not required for application materials submitted through the electronic format specified by the Department. The application must include all emission points, emission units, air pollution control equipment, and monitoring devices at the facility. All emissions generating activities, including fugitive emissions, must be included. The definition of a complete application is as indicated in 567 IAC 22.105(2). 567 IAC 22.105

G3. Certification Requirement for Title V Related Documents
Any application, report, compliance certification or other document submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. All certifications shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. 567 IAC 22.107 (4)
G4. Annual Compliance Certification
By March 31 of each year, the permittee shall submit compliance certifications for the previous calendar year. The certifications shall include descriptions of means to monitor the compliance status of all emissions sources including emissions limitations, standards, and work practices in accordance with applicable requirements. The certification for a source shall include the identification of each term or condition of the permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with all applicable department rules. For sources determined not to be in compliance at the time of compliance certification, a compliance schedule shall be submitted which provides for periodic progress reports, dates for achieving activities, milestones, and an explanation of why any dates were missed and preventive or corrective measures. The compliance certification shall be submitted to the administrator, director, and the appropriate DNR Field office. 567 IAC 22.108 (15)"e"

G5. Semi-Annual Monitoring Report
By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 22.107(4). The semi-annual monitoring report shall be submitted to the director and the appropriate DNR Field office. 567 IAC 22.108 (5)

G6. Annual Fee
1. The permittee is required under subrule 567 IAC 22.106 to pay an annual fee based on the total tons of actual emissions of each regulated air pollutant. Beginning July 1, 1996, Title V operating permit fees will be paid on July 1 of each year. The fee shall be based on emissions for the previous calendar year.
2. The fee amount shall be calculated based on the first 4,000 tons of each regulated air pollutant emitted each year. The fee to be charged per ton of pollutant will be available from the department by June 1 of each year. The Responsible Official will be advised of any change in the annual fee per ton of pollutant.
3. The emissions inventory shall be submitted annually by March 31 with forms specified by the department documenting actual emissions for the previous calendar year.
4. The fee shall be submitted annually by July 1 with forms specified by the department.
5. If there are any changes to the emission calculation form, the department shall make revised forms available to the public by January 1. If revised forms are not available by January 1, forms from the previous year may be used and the year of emissions documented changed. The department shall calculate the total statewide Title V emissions for the prior calendar year and make this information available to the public no later than April 30 of each year.
6. Phase I acid rain affected units under section 404 of the Act shall not be required to pay a fee for emissions which occur during the years 1993 through 1999 inclusive.
7. The fee for a portable emissions unit or stationary source which operates both in Iowa and out of state shall be calculated only for emissions from the source while operating in Iowa.
8. Failure to pay the appropriate Title V fee represents cause for revocation of the Title V permit as indicated in 567 IAC 22.115(1)"d".

G7. Inspection of Premises, Records, Equipment, Methods and Discharges
Upon presentation of proper credentials and any other documents as may be required by law, the permittee shall allow the director or the director's authorized representative to:

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

**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)"

**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. 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) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

G14. Excess Emissions and Excess Emissions Reporting Requirements
1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the
incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

   i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
   ii. The estimated quantity of the excess emission.
   iii. The time and duration of the excess emission.
   iv. The cause of the excess emission.
   v. The steps being taken to remedy the excess emission.
   vi. The steps being taken to limit the excess emission in the interim period.

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

   i. The identity of the equipment or source operation point from which the excess emission originated and the associated stack or emission point.
   ii. The estimated quantity of the excess emission.
   iii. The time and duration of the excess emission.
   iv. The cause of the excess emission.
   v. The steps that were taken to remedy and to prevent the recurrence of the incident of excess emission.
vi. The steps that were taken to limit the excess emission.

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

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

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

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

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

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

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

**G15. Permit Deviation Reporting Requirements**

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

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

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

**G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V Permit Modification**
1. Off Permit Changes to a Source. Pursuant to section 502(b)(10) of the CAAA, the permittee may make changes to this installation/facility without revising this permit if:
   a. The changes are not major modifications under any provision of any program required by section 110 of the Act, modifications under section 111 of the act, modifications under section 112 of the act, or major modifications as defined in 567 IAC Chapter 22.
   b. The changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions);
   c. The changes are not modifications under any provisions of Title I of the Act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or as total emissions);
   d. The changes are not subject to any requirement under Title IV of the Act (revisions affecting Title IV permitting are addressed in rules 567—22.140(455B) through 567 - 22.144(455B));
   e. The changes comply with all applicable requirements.
   f. For each such change, the permitted source provides to the department and the administrator by certified mail, at least 30 days in advance of the proposed change, a written notification, including the following, which must be attached to the permit by the source, the department and the administrator:
      i. A brief description of the change within the permitted facility,
      ii. The date on which the change will occur,
      iii. Any change in emission as a result of that change,
      iv. The pollutants emitted subject to the emissions trade
      v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.
      vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and
      vii. Any permit term or condition no longer applicable as a result of the change.

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

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

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

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

**G18. Duty to Modify a Title V Permit**
1. Administrative Amendment.
   a. An administrative permit amendment is a permit revision that does any of the following:
      i. Correct typographical errors
      ii. Identify a change in the name, address, or telephone number of any person identified in the permit, or provides a similar minor administrative change at the source;
      iii. Require more frequent monitoring or reporting by the permittee; or
      iv. Allow for a change in ownership or operational control of a source where the director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the director.
   b. The permittee may implement the changes addressed in the request for an administrative amendment immediately upon submittal of the request. The request shall be submitted to the director.
   c. Administrative amendments to portions of permits containing provisions pursuant to Title IV of the Act shall be governed by regulations promulgated by the administrator under Title IV of the Act.

2. Minor Title V Permit Modification.
   a. Minor Title V permit modification procedures may be used only for those permit modifications that satisfy all of the following:
      i. Do not violate any applicable requirement;
      ii. Do not involve significant changes to existing monitoring, reporting or recordkeeping requirements in the Title V permit;
      iii. Do not require or change a case by case determination of an emission limitation or other standard, or an increment analysis;
      iv. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed in order to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include any federally enforceable emissions caps which the source would assume to avoid classification as a modification under any provision under Title I of the Act; and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Act;
      v. Are not modifications under any provision of Title I of the Act; and
      vi. Are not required to be processed as significant modification under rule 567-22.113(455B).
   b. An application for minor permit revision shall be on the minor Title V modification application form and shall include at least the following:
      i. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
      ii. The permittee's suggested draft permit;
      iii. Certification by a responsible official, pursuant to 567 IAC 22.107(4), that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
iv. Completed forms to enable the department to notify the administrator and the affected states as required by 567 IAC 22.107(7).

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

3. Significant Title V Permit Modification.

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

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

G19. Duty to Obtain Construction Permits

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

G20. Asbestos

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

G21. Open Burning

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

G22. Acid Rain (Title IV) Emissions Allowances

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

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

1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
   a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
   b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
   c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
   d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.

2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
   e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.

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

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

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

G24. Permit Reopenings
1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"

2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
   a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
   b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
   c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"

3. A permit shall be reopened and revised under any of the following circumstances:
   a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
   b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
   c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
   d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
   e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)

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

G25. Permit Shield
1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that:
   a. Such applicable requirements are included and are specifically identified in the permit; or
   b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.
2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
3. A permit shield shall not alter or affect the following:
   a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
   b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
   c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
   d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

G26. Severability
The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8)

G27. Property Rights
The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 22.108 (9)"d"

G28. Transferability
This permit is not transferable from one source to another. If title to the facility or any part of it is transferred, an administrative amendment to the permit must be sought consistent with the requirements of 567 IAC 22.111(1). 567 IAC 22.111 (1)"d"

G29. Disclaimer
No review has been undertaken on the engineering aspects of the equipment or control equipment other than the potential of that equipment for reducing air contaminant emissions. 567 IAC 22.3(3)"c"

G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
The permittee shall notify the department’s stack test contact in writing not less than 30 days before a required test or performance evaluation of a continuous emission monitor is performed to determine compliance with applicable requirements of 567 – Chapter 23 or a permit condition. Such notice shall include the time, the place, the name of the person who will conduct the test and other information as required by the department. If the owner or operator does not provide timely notice to the department, the department shall not consider the test results or performance evaluation results to be a valid demonstration of compliance with applicable rules or permit
conditions. Upon written request, the department may allow a notification period of less than 30 days. At the department’s request, a pretest meeting shall be held not later than 15 days prior to conducting the compliance demonstration. A testing protocol shall be submitted to the department no later than 15 days before the owner or operator conducts the compliance demonstration. A representative of the department shall be permitted to witness the tests. Results of the tests shall be submitted in writing to the department's stack test contact in the form of a comprehensive report within six weeks of the completion of the testing. Compliance tests conducted pursuant to this permit shall be conducted with the source operating in a normal manner at its maximum continuous output as rated by the equipment manufacturer, or the rate specified by the owner as the maximum production rate at which the source shall be operated. In cases where compliance is to be demonstrated at less than the maximum continuous output as rated by the equipment manufacturer, and it is the owner's intent to limit the capacity to that rating, the owner may submit evidence to the department that the source has been physically altered so that capacity cannot be exceeded, or the department may require additional testing, continuous monitoring, reports of operating levels, or any other information deemed necessary by the department to determine whether such source is in compliance.

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

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

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

567 IAC 25.1(7)‘a’, 567 IAC 25.1(9)

G31. Prevention of Air Pollution Emergency Episodes

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

567 IAC 26.1(1)
G32. Contacts List
The current address and phone number for reports and notifications to the EPA administrator is:
   Iowa Compliance Officer
   Air Branch
   Enforcement and Compliance Assurance Division
   U.S. EPA Region 7
   11201 Renner Blvd.
   Lenexa, KS 66219
   (913) 551-7020
The current address and phone number for reports and notifications to the department or the Director is:
   Chief, Air Quality Bureau
   Iowa Department of Natural Resources
   Wallace State Office Building
   502 E 9th St.
   Des Moines, IA  50319-0034
   (515) 725-8200
Reports or notifications to the DNR Field Offices or local programs shall be directed to the supervisor at the appropriate field office or local program. Current addresses and phone numbers are:

**Field Office 1**
909 West Main – Suite 4
Manchester, IA 52057
(563) 927-2640

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

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

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

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

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

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

**Linn County Public Health**
Air Quality Branch
501 13th St., NW
Cedar Rapids, IA 52405
(319) 892-6000
V. Appendix A: NSPS and NESHAP

NSPS
A. 40 CFR 60 Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units
   http://www.ecfr.gov/cgi-bin/text-idx?SID=abafe852e0e857e23843f579431c1b49&node=sp40.7.60.d_0c&rgn=div6
B. 40 CFR 60 Subpart GG - Standards of Performance for Stationary Gas Turbines
   http://www.ecfr.gov/cgi-bin/text-idx?SID=abafe852e0e857e23843f579431c1b49&node=sp40.7.60.gg&rgn=div6
C. 40 CFR 60 Subpart KKKK - Standards of Performance for Stationary Combustion Turbines
   http://www.ecfr.gov/cgi-bin/text-idx?SID=abafe852e0e857e23843f579431c1b49&node=sp40.7.60.kkkk&rgn=div6
D. 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
   http://www.ecfr.gov/cgi-bin/text-idx?SID=abafe852e0e857e23843f579431c1b49&node=sp40.7.60.iiii&rgn=div6

NESHAP
   http://www.ecfr.gov/cgi-bin/text-idx?SID=9f530d9a867ab4bd23e6151f7aea767&node=sp40.14.63.zzzz&rgn=div6
   http://www.ecfr.gov/cgi-bin/text-idx?SID=abafe852e0e857e23843f579431c1b49&node=sp40.15.63.cccccc&rgn=div6