# Iowa Department of Natural Resources Title V Operating Permit

# Name of Permitted Facility: Enterprise Products Operating LLC-Iowa City NGL Station

Facility Location:5354 American Legion Road S.E.<br/>Iowa City, IA 52240Air Quality Operating Permit Number:01-TV-007R4Expiration Date:04/21/2029Permit Renewal Application Deadline:10/21/2028

EIQ Number: 92-5677 Facility File Number: 52-01-032

<u>Responsible Official</u> Name: Bradley J. Cooley Title: Senior Director Mailing Address: 1100 Louisiana St Houston, TX 77002 Phone #: 713-381-6595

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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.

1

For the Director of the Department of Natural Resources

Mainie Stein

04/22/2024

Marnie Stein, Supervisor of Air Operating Permits Section

Date

# **Table of Contents**

I.	Facility Description and Equipment List
II.	Plant - Wide Conditions
III.	Emission Point Specific Conditions
IV.	General Conditions
	G1. Duty to Comply
	G2. Permit Expiration
	G3. Certification Requirement for Title V Related Documents
	G4. Annual Compliance Certification
	G5. Semi-Annual Monitoring Report
	G6. Annual Fee
	G7. Inspection of Premises, Records, Equipment, Methods and Discharges
	G8. Duty to Provide Information
	G9. General Maintenance and Repair Duties
	G10. Recordkeeping Requirements for Compliance Monitoring
	G11. Evidence used in establishing that a violation has or is occurring.
	G12. Prevention of Accidental Release: Risk Management Plan Notification and
	Compliance Certification
	G13. Hazardous Release
	G14. Excess Emissions and Excess Emissions Reporting Requirements
	G15. Permit Deviation Reporting Requirements
	G16. Notification Requirements for Sources That Become Subject to NSPS and NESHAP Regulations
	G17. Requirements for Making Changes to Emission Sources That Do Not Require Title V
	Permit Modification
	G18. Duty to Modify a Title V Permit
	G19. Duty to Obtain Construction Permits
	G20. Asbestos
	G21. Open Burning
	G22. Acid Rain (Title IV) Emissions Allowances
	G23. Stratospheric Ozone and Climate Protection (Title VI) Requirements
	G24. Permit Reopenings
	G25. Permit Shield
	G26. Severability
	G27. Property Rights
	G28. Transferability
	G29. Disclaimer
	G30. Notification and Reporting Requirements for Stack Tests or Monitor Certification
	G31. Prevention of Air Pollution Emergency Episodes
	G32. Contacts List
IV.	Appendix A

# Abbreviations

acfm	actual cubic feet per minute
	Code of Federal Regulation
СЕ	6
	continuous emission monitor
°F	
	emissions inventory questionnaire
ЕР	emission point
EU	
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 <sub>10</sub>	particulate matter ten microns or less in diameter
SO <sub>2</sub>	sulfur dioxide
NO <sub>x</sub>	nitrogen oxides
VOC	.volatile organic compound
СО	carbon monoxide
HAP	hazardous air pollutant

# I. Facility Description and Equipment List

Facility Name: Enterprise Products Operating LLC-Iowa City NGL Station Permit Number: 01-TV-007R4

Facility Description: Gas Pipeline (SIC 4619) and Underground Storage Facility (SIC 4226)

# **Equipment List**

Emission	Emission	Emission Unit Description	IDNR
Point	Unit		Construction
Number	Number		Permit Number
EP-01	EU-01R	20-1602 Gas Turbine #1R	90-A-201-S7
EP-02	EU-02	T1302 Gas Turbine #2	90-A-202-S4
EP-03	EU-03	T1302 Gas Turbine #3	90-A-203-S5
EP-04	EU-04R	T1302 Gas Turbine #4R2	90-A-204-S7
EP-06	EU-06	T1402 Gas Turbine #6	92-A-629-S1
EP-07	EU-07	T1402 Gas Turbine #7	92-A-630-S1
EP-08	EU-08	Standby Generator	
EP-09	EU-09	Utility Flare (Flare Industries)	94-A-176
EP-10	EU-10	Emergency Flare (Callidus)	94-A-177
	EU-11	(3) LPG Storage Tanks (63,000 gal. ea.)	
EP-11	EU-14	Propane Truck Loading Terminal	
EF-11	EU-15	(2) Mercaptan Tanks (1,000 gal. and 500 gal.)	
	EU-16	Underground Storage Tank and Associated Piping	

# **Insignificant Activities Equipment List**

Insignificant Emission	Insignificant Emission Unit Description	
Unit Number		
EU-12	Methanol Storage Tank (10,000 gallon)	
EU-13	Methanol Storage Tank (10,000 gallon)	
EU-17	Dehydrator Furnace (2.7 MMBtu/hr)	
EU-18	Propane Dehydrator Heater (3.34 MMBtu/hr)	

# **II. Plant-Wide Conditions**

Facility Name: Enterprise Products Operating LLC-Iowa City NGL Station Permit Number: 01-TV-007R4

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

#### **Permit Duration**

The term of this permit is: 5 years Commencing on: 04/22/2024 Ending on: 04/21/2029

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

#### **Emission Limits**

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

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

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

#### Particulate Matter:

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

For sources constructed, modified or reconstructed prior to July 21, 1999, the emission of particulate matter from any process shall not exceed the amount determined from Table I, or amount specified in a permit if based on an emission standard of 0.1 grain per standard cubic foot of exhaust gas or established from standards provided in 23.1(455B) and 23.4(455B). Authority for Requirement: 567 IAC 23.3(2)"a"

Fugitive Dust:Attainment and Unclassified Areas - A person shall take reasonable precautions to<br/>prevent particulate matter from becoming airborne in quantities sufficient to cause a nuisance as<br/>defined in Iowa Code section 657.1 when the person allows, causes or permits any materials to be<br/>handled, transported or stored or a building, its appurtenances or a construction haul road to be used,<br/>ZLP501-TV-007R4, 04/22/2024

constructed, altered, repaired or demolished, with the exception of farming operations or dust generated by ordinary travel on unpaved roads. Ordinary travel includes routine traffic and road maintenance activities such as scarifying, compacting, transporting road maintenance surfacing material, and scraping of the unpaved public road surface. (the preceding sentence is State Only) All persons, with the above exceptions, shall take reasonable precautions to prevent the discharge of visible emissions of fugitive dusts beyond the lot line of the property on which the emissions originate. The public highway authority shall be responsible for taking corrective action in those cases where said authority has received complaints of or has actual knowledge of dust conditions which require abatement pursuant to this subrule. Reasonable precautions may include, but not be limited to, the following procedures.

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

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

#### 40 CFR 60 Subpart GG Requirements

This facility is subject to Standards of Performance for Stationary Gas Turbines – 40 CFR 60 subpart GG and the affected units are EU-03, EU-04R, EU-06 and EU-07. Applicable subpart GG requirements are incorporated into the Emission-Point Specific Conditions Section. The facility shall comply with the custom fuel monitoring (CFM) schedule approved on July 18, 1993. However, the CFM does not apply to Turbine No. 4R without prior approval from the Administrator per 40 CFR§60.334(h)(4).

Authority for Requirement:	40 CFR 60 Subpart GG
	567 IAC 23.1(2)"aa"

#### 40 CFR Part 60 Subpart A – General Provisions

The opacity standard shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. 40 CFR 60.11(c) At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate any affected facility including associated air pollution

control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. 40 CFR 60.11(d)

The permittee shall not build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere. 40 CFR 60.12

Authority for Requirement: 567 IAC 23.1(2)

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

Facility Name: Enterprise Products Operating LLC-Iowa City NGL Station Permit Number: 01-TV-007R4

# **Emission Point ID Number: EP-01**

Associated Equipment

Associated Emission Unit ID Number: EU-01R

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-01R Emission Unit Description: 20-1602 Gas Turbine #1R Raw Material/Fuel: Ethane-Propane Mix Rated Capacity: 17.93 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 90-A-201-S7

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

Pollutant: Particulate Matter<sub>10</sub> (PM<sub>10</sub>) Emission Limit(s): 0.12 lb/hr <sup>(1)</sup> Authority for Requirement: DNR Construction Permit 90-A-201-S7 (1) Limit to avoid modeling requirements for PM<sub>10</sub>.

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 90-A-201-S7 Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sub>v</sub>; 0.060lb/MMBtu Authority for Requirement: 567 IAC 23.3(3)"e" 567 IAC 23.1(2)"aaaa" 40 CFR 60 Subpart KKKK DNR Construction Permit 90-A-201-S7

Pollutant: Nitrogen Oxides (NOx) Emission Limit(s): 10.78 lb/hr; 150 ppm at 15 percent O<sub>2</sub> or 8.7 lb/MWh Authority for Requirement: 567 IAC 23.1(2)"aaaa" 40 CFR 60 Subpart KKKK DNR Construction Permit 90-A-201-S7

#### **NSPS Emission Limits**

EU ID	Subpart	Title	Туре	State Reference (567 IAC)	Federal Reference (40 CFR)
	А	General Provisions	NA	23.1(2)	§60.1 – §60.19
EU-01R	KKKK	Stationary Combustion Turbines	New firing fuels other than natural gas	23.1(2)"aaaa"	§60.4300 – §60.4420

#### **Operational Limits & Requirements**

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

- A. The Turbine #1R (EU-01R) is limited to firing a mixture of propane and ethane with a maximum sulfur content of 20 grains per 100 standard cubic feet.
  - a. The owner or operator shall record the type of fuel combusted in Turbine #1R.
  - b. Certification of the sulfur content of propane and ethane fuel blend. The owner or operator shall maintain a record of the sulfur content of all gas used in Turbine #1R. The fuel characteristics shall be specified in a current, valid purchase contract, tariff sheet or transportation contract for the fuel.
- B. The owner or operator shall submit all required reports per 40 CFR §60.4375.

Authority for Requirement: DNR Construction Permit 90-A-201-S7

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 26 Stack Opening, (inches, dia.): 24 Exhaust Flow Rate (scfm): 12,370 Exhaust Temperature (°F): 965 Discharge Style: Vertical, Unobstructed Authority for Requirement: DNR Construction Permit 90-A-201-S7

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

#### **Monitoring Requirements**

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

Compliance Methodology: Stack testing Pollutant: NOx Stack test frequency- annual Per 40 CFR §60.4340, if the NO<sub>x</sub> emission result from a performance test is less than or equal to 75 percent of the NO<sub>x</sub> emission limit for the turbine, the frequency of the subsequent testing may be reduced to once every 2 years. If the results of any subsequent performance test exceed 75 percent of the NO<sub>x</sub> emission limit for the turbine, annual testing must be resumed. Test Method: 40 CFR 60, Appendix A, Method 7E Test Run Time: 1 hour Authority for requirement: 567 IAC 23.1(2) "aaaa" 40 CFR 60 Subpart KKKK DNR Construction Permit 90-A-201-S7 Yes No 🖂 Agency Approved Operation & Maintenance Plan Required? Yes No 🖂 Facility Maintained Operation & Maintenance Plan Required? Yes 🗌 No 🖂 **Compliance Assurance Monitoring (CAM) Plan Required?** 

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: EP-02**

Associated Equipment

Associated Emission Unit ID Number: EU-02

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-02 Emission Unit Description: T1302 Gas Turbine #2 Raw Material/Fuel: Ethane, Propane mix Rated Capacity: 14.39 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 90-A-202-S4

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

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 90-A-202-S4

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppm<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3 (3)"e" DNR Construction Permit 90-A-202-S4

(1) The turbine shall not burn any fuel which contains sulfur in excess of 0.6 percent by weight.

Pollutant: Nitrogen Oxides (NOx) Emission Limit(s): 6.07lb/hr Authority for Requirement: DNR Construction Permit 90-A-202-S4

#### **Operational Limits & Requirements**

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

Work practice standards:

A. This combustion turbine is limited to firing a mixture of propane and ethane with a maximum sulfur content of 0.6 weight percent.

Reporting & Record keeping:

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

A. The owner or operator shall record the type of fuel combusted in Turbine #2.

Authority for Requirement: DNR Construction Permit 90-A-202-S4

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20 Stack Opening, (inches, dia.): 24 Exhaust Flow Rate (scfm): 11,005 Exhaust Temperature (°F): 895 Discharge Style: Vertical, Unobstructed Authority for Requirement: DNR Construction Permit 90-A-202-S4

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

#### **Monitoring Requirements**

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

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-03**

Associated Equipment

Associated Emission Unit ID Number: EU-03

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-03 Emission Unit Description: T1302 Gas Turbine #3 Raw Material/Fuel: Ethane, Propane mix Rated Capacity: 14.39 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 90-A-203-S5

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

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 90-A-203-S5

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 90-A-203-S5

(1)The turbine shall not burn any fuel which contains sulfur in excess of 0.6 percent by weight.

Pollutant: Nitrogen Oxides (NOx) Emission Limit(s): 6.07 lb/hr, 150 ppm<sup>(1)</sup> Authority for Requirement: 567 IAC 23.1(2)"aa" 40 CFR 60 Subpart GG

#### DNR Construction Permit 90-A-203-S5

(1) Allowable NO<sub>X</sub> emissions from 40 CFR 60.332(a)(2). Limit is a percent by volume (0.0150%) at 15% oxygen and on a dry basis.

#### **NSPS Emission Limits**

Pollutant	Limit	Reference
Nitrogen Oxides (NO <sub>X</sub> ) <sup>1</sup>	$STD = 0.0150 \frac{14.4}{Y} + F$	40 CFR §60.332 NSPS Subpart GG
Sulfur Dioxide (SO <sub>2</sub> )	0.015% by volume <sup>2</sup> or 0.8% by weight <sup>3</sup>	40 CFR §60.333 NSPS Subpart GG

<sup>1</sup> Standard is expressed as the average of 3 test runs. Where:

- STD = Allowable ISO corrected (if required as given in 40 CFR§60.335(b)(1)) NO<sub>X</sub> emission concentrations (percent by volume at 15% oxygen on a dry basis. For this specific turbine, the equation yields a NO<sub>X</sub> emission limit of 0.0150% by volume at 15% oxygen and on a dry basis.
- Y = Manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour. For this specific turbine the manufacturer's rated heat rate at peak load is 15.84 kJ/Watt-hr and therefore Y is 14.4.; and
- $F = NO_X$  emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of 40 CFR60.332. However per the facility's custom fuel monitoring schedule, there is no fuel nitrogen in the LPG fuel.

Per 40 CFR§60.332(k), stationary gas turbines with a heat input greater than or equal to 10 million BTU/hour when fired with natural gas are exempt from the NO<sub>x</sub> limit when being fired with an emergency fuel.

- <sup>2</sup> Per 40 CFR§60.333(a), no owner or operator shall cause to be discharged into the atmosphere from an stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Standard is expressed as the average of 3 test runs.
- <sup>3</sup> Per 40 CFR§60.333(b), no owner or operator shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppm<sub>w</sub>).

#### **Operational Limits & Requirements**

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

Operating limits for this emission unit shall be:

A. The Turbine #3 (EU-03) is limited to firing a mixture of propane and ethane with a maximum sulfur content of 0.6 weight percent.

#### Reporting & Record keeping:

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

- A. The owner or operator shall record the type of fuel combusted in Turbine #3.
- B. Certification of the sulfur content of propane and ethane fuel blend. The sulfur content of the fuel must be measured according to the monitoring schedule described in NSPS Subpart GG (40 CFR 60.334) or by a customized fuel monitoring schedule (CFMS) that has been pre-approved by the EPA. If approved, a copy of the customized fuel monitoring schedule must also be kept on site. This certification shall be used to show compliance with both the NSPS limit of 0.8 percent by weight sulfur in the fuel and the permit limit of 0.6 percent by weight sulfur in the fuel.

- C. Per 40 CFR60§334(h) and to demonstrate compliance with Section 1.b of the permit 90-A-203-S5, the owner or operator of any stationary gas turbine subject to the provisions of this subpart shall:
  - a. Monitor the nitrogen content of the fuel being fired in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
  - b. Monitor the total sulfur content of the fuel being fired in the turbine using one of the following methods.
    - i. Per 40 CFR60§334(i)(2), for owners and operators that elect not to demonstrate sulfur content using options in 40 CFR60§334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined once per unit operating day.
    - ii. Per custom schedule as described in 40 CFR60§334(i)(3). Except as provided in 40 CFR60§334(i)(3)(i) and 40 CFR60§334(i)(3)(ii) custom schedules must be approved by the Administrator before it can be used to comply with the standard in 40 CFR§60.333.
    - iii. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). The owner or operator shall use the information in either 40 CFR60§334(h)(3)(i) or 40 CFR60§334(h)(3)(ii) to make the required demonstration.

Authority for Requirement: DNR Construction Permit 90-A-203-S5

NSPS Requirements:

This emission unit is subject to the requirements of New Source Performance Standards (NSPS) Subpart GG: Standards of Performance for Stationary Gas Turbines and Subpart A: General Provisions. The owner or operator shall comply with all applicable portions of both subparts.

Authority for Requirement:	40 CFR 60 Subpart A
	40 CFR 60 Subpart GG
	DNR Construction Permit 90-A-203-S5

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 21 Stack Opening, (inches, dia.): 24 Exhaust Flow Rate (scfm): 10,600 Exhaust Temperature (°F): 900 Discharge Style: Vertical, unobstructed Authority for Requirement: DNR Construction Permit 90-A-203-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.

Pollutant	Compliance Demonstration	Methodology	Frequency
SO <sub>2</sub>	Yes	Fuel Monitoring	See Note 1

#### **Compliance Demonstration(s) and Performance Testing**

<sup>1</sup> The frequency of determining the sulfur content of the fuel shall follow 40 CFR 60.334(h). In lieu of periodic fuel monitoring, the owner or operator may choose to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(u). Owners or operators may also develop a custom monitoring schedule for determining the sulfur content of the gaseous fuel. The custom schedule must be approved by the Administrator before it can be used to comply with the standard in 40 CFR §60.333.

Test Method: 40 CFR 60, Appendix A, Method 6C Test Run Time: 1 hour

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
<b>Compliance Assurance Monitoring (CAM) Plan Required?</b> Authority for Requirement: 567 IAC 22.108(3)	Yes 🗌 No 🖂

Authority for Requirement: DNR Construction Permit 90-A-203-S5 NSPS 40 CFR Part 60 Subpart GG

# **Emission Point ID Number: EP-04**

Associated Equipment

Associated Emission Unit ID Number: EU-04

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-04 Emission Unit Description: T1302 Gas Turbine #4R2 Raw Material/Fuel: Ethane, Propane Mix Rated Capacity: 14.39 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 90-A-204-S7

(1) If visible emissions are observed other than at start-up, shut-down, or malfunction, a stack test may be required to demonstrate compliance with the particulate standard.

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf, 0.10 lb/hr Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 90-A-204-S7

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 90-A-204-S7

(1) The turbine shall not burn any fuel which contains sulfur in excess of 0.6 percent by weight.

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 6.07 lb/hr, 150 ppm<sup>(1)</sup> Authority for Requirement: 567 IAC 23.1(2)"aa" DNR Construction Permit 90-A-204-S7

(1) Allowable NO<sub>X</sub> emissions from 40 CFR 60.332(a)(2). Limit is a percent by volume (0.0150%) at 15% oxygen and on a dry basis.

#### **NSPS Emission Limits**

Pollutant	Limit	Reference (567 IAC)
Nitrogen Oxides (NO <sub>x</sub> ) <sup>1</sup>	$STD = 0.015 \frac{14.4}{Y} + F$	40 CFR §60.332 NSPS Subpart GG
Sulfur Dioxide (SO <sub>2</sub> )	0.015% by volume <sup>2</sup> or 0.8% by weight <sup>3</sup>	40 CFR §60.333 NSPS Subpart GG

<sup>1</sup>Standard is expressed as the average of 3 test runs. Where:

STD = Allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) NO<sub>X</sub> emission concentrations (percent by volume at 15% oxygen and on a dry basis. For this specific turbine, the equation yields a NO<sub>X</sub> emission limit of 0.0150% by volume at 15% oxygen and on a dry basis.

Y = Manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour. For this specific turbine the manufacturer's rated heat rate at peak load is 15.84 kJ/Watt-hr and therefore Y is 14.4.; and

F = NOX emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of 40 CFR§60.332. However per the facility's custom fuel monitoring schedule, there is no fuel nitrogen in the LPG fuel.

Per 40 CFR§60.332(k), stationary gas turbines with a heat input greater than or equal to 10 million BTU/hour when fired with natural gas are exempt from the NOX limit when being fired with an emergency fuel.

<sup>2</sup>Per 40 CFR§60.333(a), no owner or operator shall cause to be discharged into the atmosphere from an stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Standard is expressed as the average of 3 test runs.

<sup>3</sup>Per 40 CFR§60.333(b), no owner or operator shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppmw).

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

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

## **GENERAL REQUIREMENTS**

- A. Gas Turbine #4R2 (EU-04) shall only combust a mixture of propane and ethane with a maximum sulfur content of 0.6 weight percent.
  - a. The owner or operator shall record the type of fuel combusted in Gas Turbine #4R2 (EU-04).
  - b. The sulfur content of the fuel shall be measured according to the monitoring schedule described in 40 CFR §60.334 of Subpart GG or by a customized fuel monitoring schedule that has been pre-approved by the Department. If approved, a copy of the customized fuel monitoring schedule shall also be kept on site. This certification shall be used to show compliance with the NSPS limit of 0.8 percent by weight sulfur in the fuel and the permit limit of 0.6 percent by weight sulfur in the fuel.
- B. For each component and/or engine core exchange, the owner or operator shall:
  - a. Maintain a copy of the periodic maintenance cycle plan that is based on the original equipment manufacturer (OEM).
  - b. Maintain a log of all component and engine core exchange. The following information shall be included in the log:
    - i. The date of exchange/replacement;
    - ii. Any new components that differ from the previous engine core; and
    - iii. If any components differ from the previous engine core, an explanation of the effect on the combustion characteristics of the engine core.
  - c. Only exchange components and/or engine cores that are the same make, model, horsepower, and emission rating as the existing components and/or engine cores.
  - d. Not make any changes to the components and/or engine cores that affect the combustion characteristics that result in an emission increase of any pollutant.
  - e. Evaluate the required NO<sub>x</sub> stack test results in accordance with the requirements in 40 CFR Part 60, Appendix C to determine whether there is an increase in NO<sub>x</sub> emissions. The owner or operator shall:
    - i. Notify the Department within thirty (30) days if the analysis indicates an increase in  $NO_x$  emissions to the atmosphere.
    - ii. Maintain a copy of this analysis and make it available on site for review.
  - f. Determine the fixed capital costs of the new components and the fixed capital costs of an entirely new combustion turbine.
    - i. The owner or operator shall maintain a copy of this analysis for each component and/or engine core exchange.
  - g. In accordance with 40 CFR §60.15, if the fixed capital costs of the new components described in Construction Permit Condition 5.B.vi exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new combustion turbine, the owner or operator shall notify the Department of the proposed replacements. The notice shall be postmarked sixty (60) days before

construction of the replacements is commenced and must include the following information in order to determine whether the replacements constitute reconstruction under NSPS:

- i. Name and address of the owner or operator;
- ii. A brief description of the existing combustion turbine and the components which are to be replaced;
- iii. A description of the existing air pollution control equipment and the proposed air pollution control equipment;
- iv. An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new combustion turbine;
- v. The estimated life of the existing combustion turbine after the replacements; and
- vi. A discussion of any economic or technical limitations the combustion turbine may have in complying with the applicable standards of performance after the proposed replacements.
- h. If the fixed capital costs of the new components described in Condition 5.B.vi exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new combustion turbine, the owner or operator shall follow the requirements of 40 CFR §63.5(d)(3) [*Application for approval of reconstruction*]:
  - i. A brief description of the affected source and the components that are to be replaced;
  - ii. A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;
  - iii. An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new combustion turbine;
  - iv. The estimated life of the affected source after the replacements; and
  - v. A discussion of any economic or technical limitations the combustion turbine may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Department's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.
- i. If in the application for approval of reconstruction, the owner or operator designates the affected combustion turbine as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information specified in Construction Permit Conditions 5.B.viii.3 through 5.B.viii.5.

#### NSPS REQUIREMENTS

- C. The owner or operator shall comply with the applicable requirements in 40 CFR Part 60, Subpart GG [§60.330 §60.335], including those not specifically mentioned in this permit.
  - i. Per §60.334(h) and to demonstrate compliance with Permit Condition 1a, the owner or operator of any stationary gas turbine subject to the provisions of Subpart GG shall:
    - 1.Monitor the nitrogen content of the fuel being fired in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
    - 2.Monitor the total sulfur content of the fuel being fired in the turbine using one of the following methods.
      - a) Per §60.334(i)(2), for owners and operators that elect not to demonstrate sulfur content using options in §60.334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined once per unit operating day.
      - b) Except as provided in §60.334(i)(3)(i) and §60.334(i)(3)(ii), custom schedules shall be approved by the Department before it can be used to comply with the standard in §60.333.
      - c) The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). The owner or operator shall use the information in either §60.334(h)(3)(i) or §60.334(h)(ii) to make the required demonstration.

Authority for Requirement: DNR Construction Permit 90-A-204-S7

**NSPS** Requirements:

This emission unit is subject to the requirements of New Source Performance Standards (NSPS) Subpart GG: Standards of Performance for Stationary Gas Turbines and Subpart A: General Provisions. The owner or operator shall comply with all applicable portions of both subparts.

Authority for Requirement:	40 CFR 60 Subpart A
	40 CFR 60 Subpart GG
	DNR Construction Permit 90-A-204-S7

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20 Stack Opening, (inches, dia.): 24 Exhaust Flow Rate (scfm): 11,033 Exhaust Temperature (°F): 900 Discharge Style: Vertical, unobstructed Authority for Requirement: DNR Construction Permit 90-A-204-S7

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

#### **Monitoring Requirements**

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

#### **Compliance Demonstration(s) and Performance Testing**

Pollutant	Compliance Demonstration	Methodology	Frequency
SO <sub>2</sub>	Yes	Fuel Monitoring	See Note 1

<sup>1</sup> The frequency of determining the sulfur content of the fuel shall follow 40 CFR 60.334(h). In lieu of periodic fuel monitoring, the owner or operator may choose to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(u). Owners or operators may also develop a custom monitoring schedule for determining the sulfur content of the gaseous fuel. The custom schedule must be approved by the Administrator before it can be used to comply with the standard in 40 CFR§60.333. The custom fuel monitoring schedule approved on July 18, 1993 does not apply to Turbine #4R without prior approval from the Administrator per 40 CFR§60.334(h)(4).

Test Method: 40 CFR 60, Appendix A, Method 6C Test Run Time: 1 hour

Authority for Requirement: 40 CFR Part 60 Subpart GG DNR Construction Permit 90-A-204-S7

Agency Approved Operation & Maintenance Plan Required?	Yes
Facility Maintained Operation & Maintenance Plan Required?	Yes
<b>Compliance Assurance Monitoring (CAM) Plan Required?</b>	Yes
Authority for Requirement: 567 IAC 22.108(3)	

# **Emission Point ID Number: EP-06**

Associated Equipment

Associated Emission Unit ID Number: EU-06

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-06 Emission Unit Description: T1402 Gas Turbine #6 Raw Material/Fuel: Propane, Ethane mix Rated Capacity: 15.25 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 IAC 2

567 IAC 23.3(2)"d"

DNR Construction Permit 92-A-629-S1

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

Pollutant: Particulate Matter Emission Limit(s): 0.1 gr/dscf, 4.10 lb/hr Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 92-A-629-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 92-A-629-S1

(1) The turbine shall not burn any fuel which contains sulfur in excess of 0.6 percent by weight.

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 0.517 lb/hr Authority for Requirement: DNR Construction Permit 92-A-629-S1

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 6.07 lb/hr, 150ppm<sup>(1)</sup> Authority for Requirement: 567 IAC 23.1(2)"a"

DNR Construction Permit 92-A-629-S1

(1) Allowable NO<sub>X</sub> emissions from 40 CFR 60.332(a)(2). Limit is a percent by volume (0.0150%) at 15% oxygen and on a dry basis.

#### Pollutant: Carbon Monoxide (CO) Emission Limit(s): 8.10 lb/hr Authority for Requirement: Synthetic Minor DNR Construction Permit 92-A-629-S1

### **NSPS Emission Limits**

Pollutant	Limit	Reference (567 IAC)
Nitrogen Oxides (NO <sub>x</sub> ) <sup>1</sup>	$STD = 0.015 \frac{14.4}{Y} + F$	40 CFR §60.332 NSPS Subpart GG
Sulfur Dioxide (SO <sub>2</sub> )	0.015% by volume <sup>2</sup> or 0.8% by weight <sup>3</sup>	40 CFR §60.333 NSPS Subpart GG

<sup>1</sup> Standard is expressed as the average of 3 test runs. Where:

- $STD = Allowable ISO corrected (if required as given in 40 CFR 60.335(b)(1)) NO_X emission concentrations (percent by volume at 15% oxygen and on a dry basis. For this specific turbine, the equation yields a NO_X emission limit of 0.0150% by volume at 15% oxygen and on a dry basis.$
- Y = Manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour. For this specific turbine the manufacturer's rated heat rate at peak load is 15.84 kJ/Watt-hr and therefore Y is 14.4.; and
- $F = NO_X$  emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of 40 CFR§60.332. However per the facility's custom fuel monitoring schedule, there is no fuel nitrogen in the LPG fuel.

Per 40 CFR60.332(k), stationary gas turbines with a heat input greater than or equal to 10 million BTU/hour when fired with natural gas are exempt from the NO<sub>x</sub> limit when being fired with an emergency fuel.

- <sup>2</sup> Per 40 CFR§60.333(a), no owner or operator shall cause to be discharged into the atmosphere from an stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Standard is expressed as the average of 3 test runs.
- <sup>3</sup> Per 40 CFR§60.333(b), no owner or operator shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppm<sub>w</sub>).

#### **Operational Limits & Requirements**

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

Operating limits for this emission unit shall be:

A. The Turbine #6 (EU-06) is limited to firing a mixture of propane and ethane with a maximum sulfur content of 0.6 weight percent.

#### Reporting & Record keeping:

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

- A. The owner or operator shall record the type of fuel combusted in Turbine #6.
- B. Certification of the sulfur content of propane and ethane fuel blend. The sulfur content of the fuel must be measured according to the monitoring schedule described in NSPS Subpart GG (40 CFR 60.334) or by a customized fuel monitoring schedule (CFMS) that has been

pre-approved by the EPA. If approved, a copy of the customized fuel monitoring schedule must also be kept on site. This certification shall be used to show compliance with both the NSPS limit of 0.8 percent by weight sulfur in the fuel and the permit limit of 0.6 percent by weight sulfur in the fuel.

- C. Per 40 CFR60§334(h) and to demonstrate compliance with Section 1.b of the permit 92-A-629-S1, the owner or operator of any stationary gas turbine subject to the provisions of this subpart shall:
  - a. Monitor the nitrogen content of the fuel being fired in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
  - b. Monitor the total sulfur content of the fuel being fired in the turbine using one of the following methods.
    - i. Per 40 CFR60§334(i)(2), for owners and operators that elect not to demonstrate sulfur content using options in 40 CFR60§334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined once per unit operating day.
    - ii. Per custom schedule as described in 40 CFR60§334(i)(3). Except as provided in 40 CFR60§334(i)(3)(i) and 40 CFR60§334(i)(3)(ii) custom schedules must be approved by the Administrator before it can be used to comply with the standard in 40 CFR§60.333.
    - iii. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). The owner or operator shall use the information in either 40 CFR60§334(h)(3)(i) or 40 CFR60§334(h)(3)(ii) to make the required demonstration.

Authority for Requirement: DNR Construction Permit 92-A-629-S1

#### NSPS Requirements:

This emission point is subject to 40 CFR 60 Subpart A – General Provisions and 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines. Please see the Plant-wide Conditions section of this permit for the list of affected sources and requirements.

Authority for Requirement: 40 CFR 60 Subpart A 40 CFR 60 Subpart GG DNR Construction Permit 92-A-629-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 11,242
Exhaust Temperature (°F): 898
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permit 92-A-629-S1

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

#### **Monitoring Requirements**

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

Pollutant	Compliance Demonstration	Methodology	Frequency
SO <sub>2</sub>	Yes	Fuel Monitoring	See Note 1

#### **Compliance Demonstration(s) and Performance Testing**

<sup>1</sup> The frequency of determining the sulfur content of the fuel shall follow 40 CFR 60.334(h). In lieu of periodic fuel monitoring, the owner or operator may choose to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(u). Owners or operators may also develop a custom monitoring schedule for determining the sulfur content of the gaseous fuel. The custom schedule must be approved by the Administrator before it can be used to comply with the standard in 40 CFR §60.333.

Test Method: 40 CFR 60, Appendix A, Method 6C Test Run Time: 1 hour

Agency Approved Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
Facility Maintained Operation & Maintenance Plan Required?	Yes 🗌 No 🖂
<b>Compliance Assurance Monitoring (CAM) Plan Required?</b> Authority for Requirement: 567 IAC 22.108(3)	Yes 🗌 No 🖂

Authority for Requirement: DNR Construction Permit 92-A-629-S1 40 CFR Part 60 Subpart GG

## **Emission Point ID Number: EP-07**

Associated Equipment

Associated Emission Unit ID Number: EU-07

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-07 Emission Unit Description: T1402 Gas Turbine #7 Raw Material/Fuel: Propane, Ethane mix Rated Capacity: 15.25 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 40%<sup>(1)</sup> Authority for Requirement: 567 l

567 IAC 23.3(2)"d"

DNR Construction Permit 92-A-630-S1

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

Pollutant: Particulate Matter (PM) Emission Limit(s): 0.1 gr/dscf, 4.10 lbs/hr Authority for Requirement: 567 IAC 23.3(2)"a" DNR Construction Permit 92-A-630-S1

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv<sup>(1)</sup> Authority for Requirement: 567 IAC 23.3(3)"e" DNR Construction Permit 92-A-630-S1 (1) The turbine shall not burn any fuel which contains sulfur in excess of 0.6 percent by weight.

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 0.517 lbs/hr Authority for Requirement: DNR Construction Permit 92-A-630-S1

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 6.07 lbs/hr, 150ppm<sup>(1)</sup> Authority for Requirement: 567 IAC 23.1(2)"a"

DNR Construction Permit 92-A-630-S1

(1) Allowable NO<sub>X</sub> emissions from 40 CFR 60.332(a)(2). Limit is a percent by volume (0.0150%) at 15% oxygen and on a dry basis.

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 8.10 lbs/hr Authority for Requirement: DNR Construction Permit 92-A-630-S1

#### **NSPS Emission Limits**

Pollutant	Limit	Reference (567 IAC)
Nitrogen Oxides (NO <sub>x</sub> ) <sup>1</sup>	$STD = 0.015 \frac{14.4}{Y} + F$	40 CFR §60.332 NSPS Subpart GG
Sulfur Dioxide (SO <sub>2</sub> )	0.015% by volume <sup>2</sup> or 0.8% by weight <sup>3</sup>	40 CFR §60.333 NSPS Subpart GG

<sup>1</sup> Standard is expressed as the average of 3 test runs. Where:

- $STD = Allowable ISO corrected (if required as given in 40 CFR \$60.335(b)(1)) NO_X emission concentrations (percent by volume at 15% oxygen and on a dry basis. For this specific turbine, the equation yields a NO_X emission limit of 0.0150% by volume at 15% oxygen and on a dry basis.$
- Y = Manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour), or actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour. For this specific turbine the manufacturer's rated heat rate at peak load is 15.84 kJ/Watt-hr and therefore Y is 14.4.; and
- $F = NO_X$  emission allowance for fuel-bound nitrogen as defined in paragraph (a)(4) of 40 CFR§60.332. However per the facility's custom fuel monitoring schedule, there is no fuel nitrogen in the LPG fuel.

Per 40 CFR60.332(k), stationary gas turbines with a heat input greater than or equal to 10 million BTU/hour when fired with natural gas are exempt from the NO<sub>x</sub> limit when being fired with an emergency fuel.

- <sup>2</sup> Per 40 CFR§60.333(a), no owner or operator shall cause to be discharged into the atmosphere from an stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15 percent oxygen and on a dry basis. Standard is expressed as the average of 3 test runs.
- <sup>3</sup> Per 40 CFR§60.333(b), no owner or operator shall burn in any stationary gas turbine any fuel which contains total sulfur in excess of 0.8 percent by weight (8000 ppm<sub>w</sub>).

#### **Operational Limits & Requirements**

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

Operating limits for this emission unit shall be:

A. The Turbine #7 (EU-07) is limited to firing a mixture of propane and ethane with a maximum sulfur content of 0.6 weight percent.

#### Reporting & Record keeping:

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

- A. The owner or operator shall record the type of fuel combusted in Turbine #7.
- B. Certification of the sulfur content of propane and ethane fuel blend. The sulfur content of the fuel must be measured according to the monitoring schedule described in NSPS Subpart

GG (40 CFR 60.334) or by a customized fuel monitoring schedule (CFMS) that has been pre-approved by the EPA. If approved, a copy of the customized fuel monitoring schedule must also be kept on site. This certification shall be used to show compliance with both the NSPS limit of 0.8 percent by weight sulfur in the fuel and the permit limit of 0.6 percent by weight sulfur in the fuel.

- C. Per 40 CFR60§334(h) and to demonstrate compliance with Section 1.b of the permit 92-A-630-S1, the owner or operator of any stationary gas turbine subject to the provisions of this subpart shall:
  - a. Monitor the nitrogen content of the fuel being fired in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen. The nitrogen content of the fuel shall be determined using methods described in §60.335(b)(9) or an approved alternative.
  - b. Monitor the total sulfur content of the fuel being fired in the turbine using one of the following methods.
    - i. Per 40 CFR60§334(i)(2), for owners and operators that elect not to demonstrate sulfur content using options in 40 CFR60§334(h)(3), and for which the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel shall be determined once per unit operating day.
    - ii. Per custom schedule as described in 40 CFR60§334(i)(3). Except as provided in 40 CFR60§334(i)(3)(i) and 40 CFR60§334(i)(3)(ii) custom schedules must be approved by the Administrator before it can be used to comply with the standard in 40 CFR§60.333.
    - iii. The owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in §60.331(u). The owner or operator shall use the information in either 40 CFR60§334(h)(3)(i) or 40 CFR60§334(h)(3)(ii) to make the required demonstration.

Authority for Requirement: DNR Construction Permit 92-A-630-S1

**NSPS** Requirements:

This emission point is subject to 40 CFR 60 Subpart A – General Provisions and 40 CFR 60 Subpart GG – Standards of Performance for Stationary Gas Turbines. Please see the Plant-wide Conditions section of this permit for the list of affected sources and requirements.

Authority for Requirement: 40 CFR 60 Subpart A 40 CFR 60 Subpart GG DNR Construction Permit 92-A-630-S1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 20
Stack Opening, (inches, dia.): 24
Exhaust Flow Rate (scfm): 11,242
Exhaust Temperature (°F): 898
Discharge Style: Vertical, unobstructed
Authority for Requirement: DNR Construction Permit 92-A-630-S1

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

#### **Monitoring Requirements**

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

#### **Compliance Demonstration(s) and Performance Testing**

Pollutant	Compliance Demonstration	Methodology	Frequency
$SO_2$	Yes	Fuel Monitoring	See Note 1

<sup>1</sup> The frequency of determining the sulfur content of the fuel shall follow 40 CFR 60.334(h). In lieu of periodic fuel monitoring, the owner or operator may choose to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(u). Owners or operators may also develop a custom monitoring schedule for determining the sulfur content of the gaseous fuel. The custom schedule must be approved by the Administrator before it can be used to comply with the standard in 40 CFR §60.333.

Authority for Requirement: 40 CFR Part 60 Subpart GG

DNR Construction Permit 92-A-630-S1

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

Authority for Requirement: 567 IAC 22.108(3)

# **Emission Point ID Number: EP-08**

Associated Equipment

Associated Emission Unit ID Number: EU-08

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-08 Emission Unit Description: Standby Generator Raw Material/Fuel: Diesel Fuel Rated Capacity: 422HP

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

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

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

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

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

#### **Operational Limits & Requirements**

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

Process throughput:

No person shall allow, cause or permit the combustion of number 1 or number 2 fuel oil exceeding a sulfur content of 0.5 percent by weight.

Authority for Requirement: 567 IAC 23.3(3)"b"(1)

Reporting & Record keeping:

The following records shall be maintained on-site for five (5) years and available for inspection upon request by representatives of the Department of Natural Resources:

A. The facility shall monitor the percent of sulfur by weight in the fuel oil as delivered. The documentation may be vendor supplied or facility generated.

Authority for Requirement: 567 IAC 22.108(3)

#### NESHAP ZZZZ Requirements:

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

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

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

#### NSPS Subpart IIII Requirements:

Emission Standards (for engines with displacement (L/cyl) < 10):

According to 40 CFR 60.4205(b) and 4202, you must comply with the following emission standards in grams/kW-hr (grams/HP-hr):

Engine Displacement (l/cyl)	Maximum Engine Power	Model Year(s)	NMHC + NOx	СО	PM	Opacity	Rule Ref
Disp. < 10	$225 \le kW < 450$	2007+	4.0	3.5	0.20	(1)	(2)
	$(302 \le \text{HP} <$		(3.0)	(2.6)	(0.15)		
	604)						

<sup>(1)</sup>Exhaust opacity must not exceed: 20 percent during the acceleration mode; 15 percent during the lugging mode; and 50 percent during the peaks in either the acceleration or lugging modes.

<sup>(2)</sup> 40 CFR 89.112 and 40 CFR 89.113.

#### Compliance Requirements:

- 1. You must operate and maintain the engine to comply with the required emission standards over the entire life of the engine (40 CFR 60.4206) by doing all of the following (40 CFR 60.4211(a)).
  - a) Operating and maintaining the engine and control device according to the manufacturer's emission-related written instructions;
  - b) Changing only those emission-related settings that are permitted by the manufacturer; and

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

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

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

### Operating and Recordkeeping Requirements

- 1. If your emergency engine does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine (40 CFR 40.4209(a)).
- 2. There is no time limit on the use of the emergency engine in emergency situations. 40 CFR 60.4211(f)(1).
- 3. The engine may be operated for the purpose of maintenance checks and readiness testing for a maximum of 100 hours/year. See 40 CFR 60.4211(f)(2) for more information.
- 4. The engine may be operated for up to 50 hours per year for non-emergency purposes. This operating time cannot be used for peak shaving or to generate income for the facility (e.g. supplying power to the grid) and should be included in the total of 100 hours allowed for maintenance checks and readiness testing. See 40 CFR 60.4211(f)(3) for more information.

Authority for Requirement:40 CFR Part 60 Subpart IIII40 CFR 63.590(c)(1)

<u>Monitoring Requirements</u> *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: EP-09**

Associated Equipment

Associated Emission Unit ID Number: EU-09

# **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-09 Emission Unit Description: Utility Flare (Flare Industries) Raw Material/Fuel: Hydrocarbon Mixture Rated Capacity: 652.00 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 5% Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 94-A-176

Pollutant: PM-10 Emission Limit(s): 0.53 lb/hr, 2.30 TPY Authority for Requirement: DNR Construction Permit 94-A-176

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 500 ppmv Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 0.03 lb/hr, 0.13 TPY Authority for Requirement: DNR Construction Permit 94-A-176

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 3.30 lb/hr, 14.4 TPY Authority for Requirement: DNR Construction Permit 94-A-176

Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 6.67 lb/hr, 29.2 TPY Authority for Requirement: DNR Construction Permit 94-A-176 Pollutant: Carbon Monoxide (CO) Emission Limit(s): 17.46 lb/hr, 77.26 TPY Authority for Requirement: DNR Construction Permit 94-A-176

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 70 Stack Opening, (inches, dia.): 0.875 sq ft Exhaust Flow Rate (scfm): 4,380 Exhaust Temperature (°F): 100 Discharge Style: Vertical, unobstructed Authority for Requirement: DNR Construction Permit 94-A-176

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.

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required?
Facility Maintained Operation & Maintenance Plan Required?
Compliance Assurance Monitoring (CAM) Plan Required?

Authority for Requirement: 567 IAC 22.108(3)

Yes □ No ⊠ Yes □ No ⊠ Yes □ No ⊠

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## **Emission Point ID Number: EP-10**

Associated Equipment

Associated Emission Unit ID Number: EU-10

## **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-10 Emission Unit Description: Emergency Flare System (Callidus Technologies) Raw Material/Fuel: Hydrocarbon Mixture Rated Capacity: 8000 MMBtu/hr

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

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

Pollutant: Opacity Emission Limit(s): 5% Authority for Requirement: 567 IAC 23.3(2)"d" DNR Construction Permit 94-A-177

Pollutant: PM-10 Emission Limit(s): 171 lb/hr, 11.63 TPY Authority for Requirement: DNR Construction Permit 94-A-177

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

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) For Gas Fuels Emission Limit(s): 500 ppmv Authority for Requirement: 567 IAC 23.3(3)"e"

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) Emission Limit(s): 0.39 lb/hr, 0.026 TPY Authority for Requirement: DNR Construction Permit 94-A-177

Pollutant: Sulfur Dioxide (SO<sub>2</sub>) For Liquid Fuels other than #1 or #2 Diesel Emission Limit(s): 2.5 lb/MMBtu Authority for Requirement: 567 IAC 23.3(3)"b"(2)

Pollutant: Nitrogen Oxides (NO<sub>x</sub>) Emission Limit(s): 43.80 lb/hr, 2.98 TPY Authority for Requirement: DNR Construction Permit 94-A-177 Pollutant: Volatile Organic Compounds (VOC) Emission Limit(s): 90.2 lb/hr, 6.13 TPY Authority for Requirement: DNR Construction Permit 94-A-177

Pollutant: Carbon Monoxide (CO) Emission Limit(s): 239.00 lb/hr, 16.25 TPY Authority for Requirement: DNR Construction Permit 94-A-177

## **Operational Limits & Requirements**

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

## Hours of operation:

A. The emergency flare system of this permit shall not be operated more than 136 hours each calendar year.

## Reporting and Recordkeeping:

A. Records appropriate for demonstrating compliance with Emission and Operating limits must be kept monthly for this source. The records must show a tabulation of total hours operation per month and per year. This information shall be maintained on site for a minimum of five (5) years and shall be available for inspection by DNR personnel.

Authority for Requirement: DNR Construction Permit 94-A-177

## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Stack Height, (ft, from the ground): 195 Stack Opening, (inches, dia.): 20 Exhaust Flow Rate (scfm): 83,341 Exhaust Temperature (°F): 20 Discharge Style: Vertical, unobstructed Authority for Requirement: DNR Construction Permit 94-A-177

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.

The facility shall check the opacity weekly during a period when the emission unit on this emission point is at or near full capacity and record the reading. Maintain a written record of the observation and any action resulting from the observation for a minimum of five years. Opacity shall be observed to ensure that no visible emissions occur during the material handling operation of the unit. If visible emissions are observed corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If corrective action does not return the observation to no visible emissions, then a Method 9 observation will be taken as soon as possible, but no later than eight hours from the observation and corrective action will be taken as soon as possible, but no later than eight hours from the observation of visible emissions. If weather conditions prevent the observer from conducting an opacity observation, the observer shall note such conditions on the data observation sheet. At least three attempts shall be made to retake opacity readings at approximately 2-hour intervals throughout the day. If all observation attempts for a week have been unsuccessful due to weather, an observation shall be made the next operating day where weather permits.

Authority for Requirement: 567 IAC 22.108(14)

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

Authority for Requirement: 567 IAC 22.108(3)

## **Emission Point ID Number: EP-11**

Associated Equipment

Associated Emission Unit ID Number: EU-11, EU-14, EU-15, EU-16,

## **Applicable Requirements**

Emission Unit vented through this Emission Point: EU-11 Emission Unit Description: (3) 63,000 gallon LPG tanks Raw Material/Fuel: Liquid Propane Rated Capacity: 33,750 gal/hr

Emission Unit vented through this Emission Point: EU-14 Emission Unit Description: Propane Truck Loading Terminal Raw Material/Fuel: Liquid Propane Rated Capacity: 33,750 gal/hr

Emission Unit vented through this Emission Point: EU-15 Emission Unit Description: (2) Mercaptan Tanks (1,000 gal and 500 gal) Raw Material/Fuel: Mercaptan Rated Capacity: 0.183 gal/hr

Emission Unit vented through this Emission Point: EU-16 Emission Unit Description: Underground Storage Tank and Associated Piping Raw Material/Fuel: Ethane/Propane Mixture Rated Capacity: 78,750 gal/hr

## 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 requirements 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)

## **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:

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

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b"

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

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

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

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

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

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

3. Minimize the amount and duration of any excess emission to the maximum extent possible during periods of such emissions. These measures may include but not be limited to the use of clean fuels, production cutbacks, or the use of alternate process units or, in the case of utilities, purchase of electrical power until repairs are completed.

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

#### G10. Recordkeeping Requirements for Compliance Monitoring

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

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

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

g. The records of quality assurance for continuous compliance monitoring systems

(including but not limited to quality control activities, audits and calibration drifts.)

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

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

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

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

43

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

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

Notwithstanding any other provisions of these rules, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any provisions herein. 1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:

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

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

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

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

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

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

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

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

## G13. Hazardous Release

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

## G14. Excess Emissions and Excess Emissions Reporting Requirements

1. Excess Emissions. Excess emission during a period of startup, shutdown, or cleaning of control equipment is not a violation of the emission standard if the startup, shutdown or cleaning is accomplished expeditiously and in a manner consistent with good practice for minimizing emissions. Cleaning of control equipment which does not require the shutdown of the process equipment shall be limited to one six-minute period per one-hour period. An incident of excess emission (other than an incident during startup, shutdown or cleaning of control equipment) is a violation. If the owner or operator of a source maintains that the incident of excess emission was due to a malfunction, the owner or operator must show that the conditions which caused the incident of excess emission were not preventable by reasonable maintenance and control measures. Determination of any subsequent enforcement action will be made following review of this report. If excess emissions are occurring, either the control equipment causing the excess emission shall be repaired in an expeditious manner or the process generating the emissions shall be shutdown within

a reasonable period of time. An expeditious manner is the time necessary to determine the cause of the excess emissions and to correct it within a reasonable period of time. A reasonable period of time is eight hours plus the period of time required to shut down the process without damaging the process equipment or control equipment. A variance from this subrule may be available as provided for in Iowa Code section 455B.143. In the case of an electric utility, a reasonable period of time is eight hours plus the period of time until comparable generating capacity is available to meet consumer demand with the affected unit out of service, unless, the director shall, upon investigation, reasonably determine that continued operation constitutes an unjustifiable environmental hazard and issue an order that such operation is not in the public interest and require a process shutdown to commence immediately.

2. Excess Emissions Reporting

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

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

ii. The estimated quantity of the excess emission.

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

iv. The cause of the excess emission.

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

vi. The steps being taken to limit the excess emission in the interim period. b. Written Reporting of Excess Emissions. A written report of an incident of excess emission shall be submitted as a follow-up to all required initial reports to the department within seven days of the onset of the upset condition, and shall include as a minimum the

following:

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

ii. The estimated quantity of the excess emission.

iii. The time and duration of the excess emission.

iv. The cause of the excess emission.

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

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

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

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

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

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

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

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

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

## G15. Permit Deviation Reporting Requirements

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

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

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

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

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

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

b. The changes do not exceed the emissions allowable under the permit (whether expressed

therein as a rate of emissions or in terms of total emissions);

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

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

e. The changes comply with all applicable requirements.

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

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

ii. The date on which the change will occur,

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

iv. The pollutants emitted subject to the emissions trade

v. If the emissions trading provisions of the state implementation plan are invoked, then Title V permit requirements with which the source shall comply; a description of how the emissions increases and decreases will comply with the terms and conditions of the Title V permit.

vi. A description of the trading of emissions increases and decreases for the purpose of complying with a federally enforceable emissions cap as specified in and in compliance with the Title V permit; and

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

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

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

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

## **G24.** Permit Reopenings

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

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

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

b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.

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

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

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

mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;

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

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

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

4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)

5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3)

## G25. Permit Shield

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

a. Such applicable requirements are included and are specifically identified in the permit; or b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.

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

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

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

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

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

## G26. Severability

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

## G27. Property Rights

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

## **G28.** Transferability

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

## G29. Disclaimer

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

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

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

Stack Test Review Coordinator Iowa DNR, Air Quality Bureau Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-9545

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

567 IAC 25.1(7)"a", 567 IAC 25.1(9)

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

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

#### G32. Contacts List

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

Air Branch Enforcement and Compliance Assurance Division U.S. EPA Region 7 11201 Renner Blvd. Lenexa, KS 66219 (913) 551-7020

The current address and phone number for reports and notifications to the department or the Director is:

Chief, Air Quality Bureau Iowa Department of Natural Resources Wallace State Office Building 502 E 9<sup>th</sup> St. Des Moines, IA 50319-0034 (515) 725-8200

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

Field Office 1 1101 Commercial Court, Suite 10 Manchester, IA 52057 (563) 927-2640

#### Field Office 3

1900 N. Grand Ave. Spencer, IA 51301 (712) 262-4177

#### Field Office 5

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

#### Polk County Public Works Dept.

Air Quality Division 5885 NE 14th St. Des Moines, IA 50313 (515) 286-3351 Field Office 2 2300-15th St., SW Mason City, IA 50401 (641) 424-4073

#### **Field Office 4**

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

#### Field Office 6

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

#### Linn County Public Health

Air Quality Branch 1020 6<sup>th</sup> Street SE Cedar Rapids, IA 52401 (319) 892-6000

## **Appendix A: Reference Web Links**

40 CFR Part 60, Subpart GG - Standards of Performance for Stationary Gas Turbines https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-GG

40 CFR Part 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-KKKK

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

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