Iowa Department of Natural Resources Title V Operating Permit

Name of Permitted Facility: Cedar Rapids WPCF

Facility Location: 7525 Bertram Road SE, Cedar Rapids, IA 52403

Air Quality Operating Permit Number: 05-TV-001R2

Expiration Date: June 13, 2024

Permit Renewal Application Deadline: December 13, 2023

EIQ Number: 92-9044

Facility File Number: 57-01-077

Responsible Official

Name: Jeff Pomeranz

Title: City Manager, City of Cedar Rapids

Mailing Address: City Hall, 101 First Street SE, Cedar Rapids, IA 52401

Phone #: (319) 286-5080

Permit Contact Person for the Facility

Name: Michael Kuntz

Title: Utilities Environmental Manager

Mailing Address: 7525 Bertram Road SE, Cedar Rapids, IA 52403

Phone #: (319) 286-5282

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

For the Director of the Department of Natural Resources

Lori Hanson, Supervisor of Air Operating Permits Section

Date

6/14/19

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Abbreviations

acfm	actual cubic feet per minute
ATI	
	Carbonaceous Activated Sludge
	Code of Federal Regulation
CE	
	continuous emission monitor
D	
	diesel oxidation catalyst
°F	
	emissions inventory questionnaire
EP	
EU	
	grains per dry standard cubic foot
gr./100 cf	grains per one hundred cubic feet
H	
	Iowa Administrative Code
	Iowa Department of Natural Resources
MBS	
	motor vehicle air conditioner
	North American Industry Classification System
	Nitrification Activated Sludge
	new source performance standard
OC	
	parts per million by volume
PD	* *
lb./hr	pounds per million British thermal units
PTO	
	Source Classification Codes
	standard cubic feet per minute
	Standard Industrial Classification
TPY	
	United States Environmental Protection Agency
	vertical (without rain cap or with unobstructing rain cap)
WPCF	Water Pollution Control Facility
TD 11 4 4	
<u>Pollutants</u>	
As	
Be	3
Cd	
Cr	
CO	
HAP	*
H_2S	
Hg	
Ni	
NO _x	
PM	
	particulate matter ten microns or less in diameter
SO ₂	
THC	
VOC	volatile organic compound

I. Facility Description and Equipment List

Facility Name: Cedar Rapids Water Pollution Control Facility Permit Number: 05-TV-001R2

Facility Description: Sewage Treatment Facility (NAICS 221320; SIC 4952)

Equipment List

Emission Point Number	nt Unit Emission Unit Description		Construction Permit Number(s) (ATI/PTO
001		V . V . D . H	4532 / 4753-R4
003	001-1	Main Lift Building (Dry Well)	4714 / 4754-R4
	300-3	Centrifuge #1 Centrate	
	300-4	Centrifuge #1 Drop Hood	
	300-5	Centrifuge #2 Centrate	
	300-6	Centrifuge #2 Drop Hood	
	300-7	Centrifuge Mezzanine (South)	
	300-8	Centrifuge Mezzanine (North)	
	300-9	Solids Dewatering Building Operating Floor	
	300-10	Grit Room Exhaust	
	300-11	Stair Screen	
012	300-12	Grit Hopper	7047 /
019	300-13	Solids Dewatering Building Manhole	7048 /
	300-14	Incinerator Manhole	
	300-15	High Pressure Pump #1	
	300-16	High Pressure Pump #2	
	300-17	High Pressure Pump #3	
	300-18	High Pressure Pump #4	
	300-20	Blend Tank #1	
	300-21	Blend Tank #2	
	300-22	Belt Filter Press #1 (East)	
	300-23	Belt Filter Press #2 (West)	
019	300-19	Storage Tank	7048 /
	013-1	Sludge Incinerator	
013	013-1B		6532 / 6411-R1
014	300-1	Decant Tank #1	4459 / 4516-R3
	300-2	Decant Tank #2	
015	015-1	Auxiliary Boiler #3	6073 / 6157
016	016-1	Auxiliary Boiler #2 (North Boiler)	5050 / 5149
017	017-1	Auxiliary Boiler #1 (South Boiler)	5051 / 5148
021	021-1	Alkaline Stabilization Silo #1 (East)	6035 / 6103
022	022-1	Alkaline Stabilization Silo #2 (West)	6036 / 6104
034	034-1	CAS/NAS Silo (North)	1313 / 1040
036	036-1	Standby Generator (Main Lift)	1946 / 1912
037	037-1	Standby Generator (Solids Dewatering)	6037 / 6113
040	040-1	Standby Generator (#3N – Final Lift)	2782 / 2772
041	041-1	Standby Generator (#7S – Final Lift)	2781 / 2773
042	042-1	Standby Generator (Flood Wall Pump Station – North)	6590 / 6454
043	043-1	Standby Generator (Flood Wall Pump Station – South)	6591 / 6455
045	045-1	Magnesium Bisulfite Tank (North)	6999 / 6766

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Emission Point Number	int Unit Emission Unit Description Number		Construction Permit Number(s) (ATI/PTO
	045-2	Magnesium Bisulfite Tank (South)	
046	046-1	Chlorine Building	7081 / 6926
	203-1A	Roughing Filter #1	
	203-1B	Roughing Filter #4	
	203-2A	Roughing Filter #2	
	203-2B	Roughing Filter #3	
	203-5	PUF JXN Box	
	203-6	Scum Box and AE JXN Box	
	203-7	Primary Clarifier A-1	
	203-8	Primary Clarifier A-2	
	203-9	Primary Clarifier A-3	
	203-10	"A" DAF Thickener Overflow	
	203-11	"B" DAF Thickener Overflow	
050	203-12	"C" DAF Thickener Overflow	7037 /
051	203-13	Gravity Belt Thickener #1	7038 /
052	203-14	Gravity Belt Thickener #2	7039 /
	203-15	Gravity Belt Thickener #3	
	203-16	Gravity Belt Thickener Overflow Wet Well	
	203-17	Anaerobic Pretreatment Preacidification Tank	
	203-18	Anaerobic Pretreatment Reactor #1	
	203-19	Anaerobic Pretreatment Reactor #2	
	203-20	Anaerobic Pretreatment Reactor #3	
	203-21	Anaerobic Pretreatment Storage Tank	
	203-22	Anaerobic Pretreatment Standpipe	
	203-23	Anaerobic Pretreatment Vacuum Compressor	
	203-24	Anaerobic Pretreatment Sulfur Settling Tank	
	203-25	Roughing Filter Effluent Junction Box	
053	053-1	Excess Biogas Flare	5878 / 6105
054			5879 / 6106
056	056-1	Emergency Biogas Flare	5880 / 6107
951	951-1	Emergency Generator (Return Sewer Pump Station)	CI 168

Insignificant Activities Equipment List

Insignificant Emission Unit ID	Insignificant Emission Unit Description
002-1(1)	Main Lift Carbon Scrubber (LCPH ATI 0001 / PTO 2195)
055-1(1)	Anaerobic Bioreactor (LCPH ATI 4702 / PTO 6265)
104-1	Diesel Tank (Main Lift)
105-1	Diesel Tank (Solids)
106-1	3N and 7S Diesel Storage Tank
204-1	Space Heaters – Incineration Building (2)
206-1	Space Heaters – Solids Pump Building (2)
207-1	Air Makeup Units (10)
208-1	Space Heaters – Centrifuge Bldg. (6)

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⁽¹⁾ The construction permit associated with this emission unit does not contain any specific terms or conditions, therefore it qualifies as an insignificant activity per rule 567 IAC 22.103.

II. Plant-Wide Conditions

Facility Name: Cedar Rapids WPCF Permit Number: 05-TV-001R2

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

Permit Duration

The term of this permit is: less than 5 years

Commencing on: June 14, 2019 Ending on: June 13, 2024

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

Emission Limits

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

Opacity (visible emissions): 20% opacity
Authority for Requirement: LCO Sec. 10-60(a)

SO₂: 500 parts per million by volume

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

LCO Sec. 10-65(a)(2)

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"

Particulate Matter: No person shall permit, cause, suffer or allow the emission of particulate matter into the atmosphere in any one hour from any emission point from any process equipment at a rate in excess of that specified in Table I for the process weight rate allocated to such emission point. The emission standards in LCO Sec. 10-62(a)(1) shall apply and those specified in LCO Sec.'s 10-61, 10-62 and Table I shall not apply to each process of the types listed in those sections, with the following exception: whenever the compliance status, history of operations, ambient air quality in the vicinity, or the type of control equipment utilized, would warrant maximum control, the Air Pollution Control Officer may enforce 0.1 grain per standard cubic foot of exhaust gas, or Table I of this section, whichever would result in the lowest allowable emission rate.

Authority for Requirement: LCO Sec. 10-62(a)

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

- 1. Use, where practical, of water or chemicals for control of dusts in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land.
- 2. Application of suitable materials, such as but not limited to asphalt, oil, water or chemicals on unpaved roads, material stockpiles, race tracks and other surfaces which can give rise to airborne dusts.
- 3. Installation and use of containment or control equipment, to enclose or otherwise limit the emissions resulting from the handling and transfer of dusty materials, such as but not limited to grain, fertilizers or limestone.
- 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"

LCO Sec. 10-66

Regulatory Authority

This facility is located in Linn County, Iowa. Linn County Public Health Department, under agreement with the Iowa Department of Natural Resources (DNR), is the primary regulatory agency in Linn County. This Title V permit is issued by the Iowa Department of Natural Resources, however, required contacts and information submittals referred to in this permit as required by "the Department" should continue to be directed to the Linn County Public Health Department office. This will include such items as stack test notification, stack test results submittal, oral and written excess emission reports, and reports and records required in the Linn County construction permits. Information specifically required by the Title V permit such as the annual EIQ and fees, annual compliance certification, semi-annual monitoring report and any Title V forms submitted for updates, modifications, renewals, etc. must be submitted to the Iowa DNR.

Authority for Requirement: 567 IAC 22.108

40 CFR 60 Subpart Dc Requirements

This facility is subject to Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units. Affected units at the facility are EU015-1 (Auxiliary Boiler #3), EU016-1 (Auxiliary Boiler #2), and EU017-1 (Auxiliary Boiler #1).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 60 Subpart Dc

567 IAC 23.1(2)"III" LCO Sec. 10-62(b)(64)

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40 CFR 60 Subpart O Requirements

This facility is subject to Standards of Performance for Sewage Treatment Plants. Affected units at the facility are EU013-1 and EU013-1B (Sludge Incinerator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 60 Subpart O

567 IAC 23.1(2)"k" LCO Sec. 10-62(b)(11)

40 CFR 60 Subpart IIII Requirements

This facility is subject to Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Affected unit at the facility is EU951-1 (Emergency Generator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 60 Subpart IIII

567 IAC 23.1(2)"yyy" LCO Sec. 10-62(b)(77)

40 CFR 60 Subpart JJJJ Requirements

This facility is subject to Standards of Performance for Stationary Spark Ignition Internal Engines. Affected units at the facility are EU042-1 (Standby Generator) and EU043-1 (Standby Generator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 60 Subpart JJJJ

567 IAC 23.1(2)"zzz" LCO Sec. 10-62(b)(78)

40 CFR 61 Subpart E Requirements

This facility is subject to National Emission Standard for Mercury. Affected units at the facility are EU013-1 and EU013-B (Sludge Incinerator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 61 Subpart E

567 IAC 23.1(3)"d" LCO Sec. 10-62(c)(4)

40 CFR 62 Subpart LLL Requirements

This facility is subject to Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010. Affected units at the facility are EU013-1 and EU013-B (Sludge Incinerator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 62 Subpart LLL

567 IAC 23.1(5)"e"

40 CFR 63 Subpart ZZZZ Requirements

This facility is subject to National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Affected units at the facility are EU036-1 (Standby Generator), EU037-1 (Standby Generator), EU040-1 (Standby Generator), EU041-1 (Standby Generator), EU042-1 (Standby Generator), EU043-1 (Standby Generator), and EU951-1 (Emergency Generator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR Part 63 Subpart ZZZZ

567 IAC 23.1(4)"cz" LCO Sec. 10-62(d)(104)

40 CFR 503 Subchapter O Part 503 Requirements

This facility is subject to Standards for the Use or Disposal of Sewage Sludge. Affected units at the facility are EU013-1 and EU013-B (Sludge Incinerator).

See Appendix A, Applicable Federal Standards.

Authority for Requirement: 40 CFR 503 Subchapter O Part 503

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III. Emission Point-Specific Conditions

Facility Name: Cedar Rapids WPCF Permit Number: 05-TV-001R2

Emission Point ID Number: 001, 003

Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
001	001-1	Main Lift Building	Air	0.54 MMCF/hr	001-1	Scrubber
003	001-1	(Dry Well)	Air	0.54 MMCF/hr	003-1	Scrubber

Applicable Requirements

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

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

EP	Pollutant	Combined Emission Limit(s)	Authority for Requirement
001	H ₂ S	2.15 lb/hr; 9.4 tpy	LCPH ATI 4532 / PTO 4753-R4
003	1125	2.13 10/11i, 9.4 tpy	LCPH ATI 4714 / PTO 4754-R4

Operational Limits & Requirements

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

Operating Requirements and Associated Recordkeeping

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

A. The control equipment (CE001-1 and CE003-1) shall be maintained according to manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment (CE001-1 and CE003-3).

Authority for Requirement: LCPH ATI 4532 / PTO 4753-R4; LCPH ATI 4714 / PTO 4754-R4

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
001	15.3	V	24	55-80	4,500	LCPH ATI 4532 / PTO 4753-R4
003	15.3	V	24	55-80	4,500	LCPH ATI 4714 / PTO 4754-R4

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)

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Emission Point ID Number: 012, 019

Associated Equipment

Associated Equipment							
EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description	
	300-3	Centrifuge #1 Centrate					
	300-4	Centrifuge #1 Drop Hood		250 gpm			
	300-5	Centrifuge #2 Centrate		3 dry tons/hr			
	300-6	Centrifuge #2 Drop Hood					
	300-7	Centrifuge Mezzanine (South)		2,100 cfm			
	300-8	Centrifuge Mezzanine (North)		2,100 cm			
	300-9	Solids Dewatering Building Operating Floor		2,000 cfm			
	300-10	Grit Room Exhaust		3,400 cfm]		
	300-11	Stair Screen		3.6 MGD			
012 019	300-12	Grit Hopper	Air	Air	Screw – 40 ft ³ /hr Conveyor – 200 ft ³ /hr Blower – 750 cfm	012-1 019-1	Biotrickling Filter Wet Chemical Scrubber
	300-13	Solids Dewatering Building Manhole		100 cfm			
	300-14	Incinerator Manhole		1,500 cfm			
	300-15	High Pressure Pump #1		150 gpm			
	300-16	High Pressure Pump #2					
	300-17	High Pressure Pump #3		150 gpm			
	300-18	High Pressure Pump #4					
	300-19	Storage Tank		2,835,888 gallons			
	300-20	Blend Tank #1		264,231 gallons			
	300-21	Blend Tank #2		264,231 gallons			
	300-22	Belt Filter Press #1 (East)		140 @ 1.5.20/			
	300-23	Belt Filter Press #2 (West)		140 gpm @ 1.5-3%			

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement			
012		0.4 tpv(1)	LCPH ATI 7047-R1			
019	H_2S	9.4 tpy ⁽¹⁾	9.4 tpy	9.4 tpy	LCPH ATI	LCPH ATI 7048
019		9 ppm _v ⁽²⁾	LCPH ATI 7048			

¹ This limit includes emissions from EP012 and EP019.

Operational Limits & Requirements

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

² This emission limit is based on a twelve (12) month rolling average.

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:

EP012

- B. The biotrickling filter (CE012-1) shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the control equipment associated with this emission point.
- C. The normal operating pH range for the biotrickling filter (CE012-1) shall be maintained between 1.8 and 3.0 S.U. The owner or operator shall monitor and record the pH in the biotrickling filter on a weekly basis.
- D. Wash cycles in the biotrickling filter (CE012-1) shall be performed at a minimum of once every two hours. The owner or operator shall monitor and record the wash cycle times.

Authority for Requirement: LCPH ATI 7047-R1

EP019

- A. The wet chemical scrubber (CE019-1) shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the control equipment associated with this emission point.
- B. The normal operating pH in the wet chemical scrubber (CE019-1) shall be maintained greater than 8.0 S.U. The owner or operator shall monitor and record the pH in the wet chemical scrubber on a weekly basis.
- C. The twelve (12) month rolling average outlet concentration of hydrogen sulfide (H₂S) shall not exceed 9 ppm_v. The owner or operator shall monitor and record the outlet concentration of H₂S on a weekly basis. The owner or operator shall calculate the monthly average from the weekly outlet concentrations of H₂S. The twelve (12) month rolling average shall be calculated from the monthly average outlet concentrations of H₂S.

Authority for Requirement: LCPH ATI 7048

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
012	42.9	V	48	Ambient	25,000	LCPH ATI 7047-R1
019	58	V	54	4-150	25,000	LCPH ATI 7048

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.

Stack Testing (EPs 012 and 019)

Refer to Appendix E, Stack Testing, for the applicable requirements.

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

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Emission Point ID Number: 013

Associated Equipment Table 1

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
	013-1		Sludge	3.0 Dry ton/hr		
	013-1	Sludge Incinerator	Natural Gas	30.15 MMBtu/hr	053-1	Sulfur Scrubber
013	013-1B		Biogas	30.15 MMBtu/hr	013-1	Venturi Scrubber System
	300-1	Decant Tank #1	Wastewater	290,000 Gallons	013-2	Low NO _x Burners
	300-2	Decant Tank #2	Wastewater	290,000 Gallons		

Associated Equipment Table 2

EP	EU	CEM
012	013-1	ME013-1 - CO
013	013-1B	$ME013-2-O_2$

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement	
	Opacity	20%	LCO Sec.10-60(a) 40 CFR §60.152(a)(2) LCO Sec. 10-62(b)(11) 567 IAC 23.1(2)"k"		
	PM-Federal	1.30 lb/ton dry sludge input	40 CFR §60.152(a)(1) LCO Sec. 10-62(b)(11) 567 IAC 23.1(2)"k"		
	PM ₁₀	3.04 lb/hr			
	SO_2	9.0 lb/hr; 39.4 tpy ⁽¹⁾			
	NO _x	7.4 lb/hr			
013	THC	100 ppm _v ⁽²⁾	40 CFR §503.44(c)	LCPH ATI 6532 / PTO 6411-R1	
013	СО	100 ppm _v ⁽²⁾	40 CFR §503.40(c)(2)	LCFII ATT 0332 / FTO 0411-RT	
	Hg 3.2 kg (7.1 lb) / 24-hour period		40 CFR §61.52(b) LCO Sec. 10-62(c)(4) 567 IAC 23.1(3)"d"		
	Be	10 gm (0.022 lb) / 24-hour period	40 CFR §503.43(a)		
	Pb	Calculated ⁽³⁾	40 CFR §503.43(c)		
	As	Calculated ⁽⁴⁾	40 CFR §503.43(d)		
	Cd	Calculated ⁽⁴⁾	40 CFR §503.43(d)		
	Cr	Calculated ⁽⁴⁾	40 CFR §503.43(d)		
	Ni	Calculated ⁽⁴⁾	40 CFR §503.43(d)		

⁽¹⁾ The emission limit applies to the combined emissions of EP013, EP053, EP054, and EP056 when burning biogas.

$$C = \frac{0.1 \times MAAQS \times 86,400}{DF \times (1 - CE) \times SF}$$
 Eq

Eq. (4)

C = Average daily concentration of lead in sewage sludge.

NAAQS = National Ambient Air Quality Standard for lead in micrograms per cubic meter.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

CE = Sewage sludge incinerator control efficiency for lead in hundredths.

⁽²⁾ The THC and CO emission limits are based on the monthly average concentration corrected for 0% moisture and 7% oxygen. The owner or operator must only comply with either the THC or CO emission limit pursuant to 40 CFR 503.40(c).

^{(3) (1)} The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using Equation (4).

- SF = Sewage sludge feed rate in metric tons per day (dry weight basis).
- (2) The dispersion factor (DF) in equation (4) shall be determined from an air dispersion model in accordance with §503.43(e).
- (i) When the sewage sludge stack height is 65 meters or less, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).
- (ii) When the sewage sludge incinerator stack height exceeds 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100(ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).
- (3) The control efficiency (CE) for equation (4) shall be determined from a performance test of the sewage sludge incinerator in accordance with \$503.43(e).
- (4) (1) The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator each shall not exceed the concentration calculated using equation (5).

$$C = \frac{RSC \times 86,400}{DF \times (1 - CE) \times SF}$$
 Eq. (5)

Where:

C = Average daily concentration of arsenic, cadmium, chromium, or nickel in sewage sludge.

CE = Sewage sludge incinerator control efficiency for arsenic, cadmium, chromium, or nickel in hundredths.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

RSC = Risk specific concentration for arsenic, cadmium, chromium, or nickel in micrograms per cubic meter.

SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

(2) The risk specific concentrations for arsenic, cadmium, and nickel used in equation (5) shall be obtained from Table 1 of \$503.43.

TABLE 1 OF §503.43—RISK SPECIFIC CONCENTRATION FOR ARSENIC, CADMIUM, AND NICKEL

Pollutant	Risk specific concentration (micrograms per cubic meter)
Arsenic	0.023
Cadmium	0.057
Nickel	2.0

(3) The risk specific concentration for chromium used in equation (5) shall be obtained from Table 2 of \$503.43 or shall be calculated using equation (6).

TABLE 2 OF §503.43—RISK SPECIFIC CONCENTRATION FOR CHROMIUM

Type of Incinerator	Risk specific concentration (micrograms per cubic meter)	
Other types with wet scrubber		0.064

$$RSC = \frac{0.0085}{m}$$
 Eq. (6)

Where:

RSC = risk specific concentration for chromium in micrograms per cubic meter used in equation (5).

- r = decimal fraction of the hexavalent chromium concentration in the total chromium concentration measured in the exit gas from the sewage sludge incinerator stack in hundredths.
- (4) The dispersion factor (DF) in equation (5) shall be determined from an air dispersion model in accordance with §503.43(e).
- (i) When the sewage sludge incinerator stack height is equal to or less than 65 meters, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).

Operational Limits & Requirements

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

Federal Standards

A. New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
013-1	A	General Conditions	NA	10-62(b)	§60.1 – §60.19
013-1B	О	Standards of Performance for Sewage Treatment Plants	NA	10-62(b)(11)	§60.150 – §60.156

Authority for Requirement: LCPH ATI 6532 / PTO 6411-R1; 567 IAC 23.1(2)"k"; LCO Sec. 10-62(b)(11); 40 CFR 60 Subpart O

B. <u>National Emission Standards for Hazardous Air Pollutants (NESHAP) Part 61:</u> The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
013-1	A	General Conditions	NA	10-62(d)(1)	§61.1 – §61.19
013-1B	Е	National Emission Standard for Mercury	NA	10-62(c)(4)	§61.50 – §61.56

Authority for Requirement: LCPH ATI 6532 / PTO 6411-R1; 567 IAC 23.1(3)"d"; LCO Sec. 10-62(c)(4); 40 CFR 61 Subpart E

C. <u>40 Subchapter O – Sewage Sludge Part 503 Standards for the Use or Disposal of Sewage Sludge:</u>
The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
013-1	A	General Conditions	NA		§503.1 – §503.9
013-1B	Е	Incineration	NA		§503.40 – §503.48

Authority for Requirement: LCPH ATI 6532 / PTO 6411-R1; 40 CFR Subchapter O Part 503

D. This emission unit is subject to following federal regulation: Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010 [40 CFR Part 62, Subpart LLL]. Authority for Requirement: 40 CFR Part 62 Subpart LLL; 567 IAC 23.1(5)"e"; LCPH ATI 6532 / PTO 6411-R1

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The sulfur scrubber (CE053-1) shall maintain an effective removal efficiency for H₂S at a level no less than 99% during operation. The H₂S content in the biogas shall be determined upstream and downstream of the sulfur scrubber (CE053-1) in order to calculate the scrubber efficiency. Appropriate grab samples shall be collected a minimum of 3 days a week. In addition, the owner operator shall maintain the following records pertaining to the sulfur scrubber (CE053-1):
 - i. H₂S content of biogas prior to and after CE053-1 and the calculated removal efficiency.
 - ii. The pH of CE053-1 liquor shall be maintained at a minimum of 7.5 and be monitored continuously to regulate the NaOH make-up feed rates to CE053-1.
 - iii. The make-up liquor flow rate in CE053-1 shall be maintained at a minimum of 400 gallons per minute and be monitored on a daily basis.
 - iv. On occurrences where CE053-1 efficiency is determined to be less than 99%, daily efficiency determinations shall be made and emissions calculated until an efficiency of 99% is maintained, except on weekends and holidays. On weekends and holidays, efficiency determinations and emissions shall be calculated the next business day and daily thereafter during business days until an efficiency of 99% is maintained.
- B. During periods that the sulfur scrubber (CE053-1) and/or associated equipment is taken offline for maintenance and/or repair, all unscrubbed biogas shall be directed through the emergency biogas flare (EU056-1). Burning unscrubbed biogas in the sludge incinerator (EU013-1B) is prohibited.
- C. All control equipment (CE013-1 and CE053-1) shall be maintained according to manufacturer's specifications and good operating practices. The owner or operator shall maintain records of all maintenance completed on the control equipment (CE013-1 and CE-053-1).
- D. The owner or operator shall combust only biogas or natural gas in the sludge incinerator (EU013-1, EU013-1B). Monitor and record the biogas flowrate to the sludge incinerator (EU013-1B) on a daily basis and calculate monthly and 12-month rolling totals of biogas production.
- E. The owner or operator shall calculate monthly and 12-month rolling totals of SO₂ emissions from the combustion of biogas in the sludge incinerator (EU013-1B).

- F. The owner or operator shall comply with the requirements of 40 CFR §60.1-§60.19 [NSPS Subpart A] to comply with LCO Sec. 10-62(b).
- G. The owner or operator shall comply with the requirements of NSPS Subpart O by meeting the standard for particulate matter, monitoring of operations, test methods and procedures, and reporting of 40 CFR §60.152-§60.155 to comply with LCO Sec. 10-62(b)(11).
 - i. Submit a report semi-annually report pursuant to 40 CFR §60.155 postmarked by March 31st and September 30th for the previous six-month reporting period.
- H. The owner or operator shall comply with the requirements of 40 CFR §61.1-§61.19 [NESHAP Subpart A] to comply with LCO Sec. 10-62(c).
- I. The owner or operator shall comply with the requirements of NESHAP Subpart E by meeting the emission standard, stack sampling, sludge sampling, and monitoring of emissions and operations of 40 CFR §61.52- §61.55 to comply with LCO Sec. 10-62(c)(4).
- J. The owner or operator shall comply with the requirements of 40 CFR 503 Subpart E by complying with the requirements of 40 CFR \$503.40-\$503.48.
 - i. Submit an annual report pursuant to 40 CFR §503.48 by February 19th for the previous calendar year.
- K. The owner or operator shall continuously monitor the following site specific operating parameters as established pursuant to 40 CFR §62.15960 and comply with the minimum limits approved by the administrator:
 - i. Afterburner chamber temperature
 - ii. Scrubber (CE013-1) pressure drop
 - iii. Scrubber (CE013-1) water flow rate
 - iv. Scrubber (CE013-1) water effluent pH

Authority for Requirement: LCPH ATI 6532 / PTO 6411-R1

Continuous Emission Monitoring Systems (CEMS)

- A. Pursuant to 40 CFR §60.153(b)(2), the owner or operator of the sludge incinerator shall install, calibrate, and maintain, and operate a monitoring device that continuously measures and records the oxygen content of the incinerator exhaust gas. The oxygen monitor shall be located upstream of any rabble shaft cooling air inlet to the incinerator exhaust gas stream, fan, ambient air recirculation damper, or any other source of dilution air. The oxygen monitoring device shall be certified by the manufacturer to have a relative accuracy of ±5 percent over its operating range and shall be calibrated according to method(s) prescribed by the manufacturer at least once each 24-hour operating period.
- B. Pursuant to 40 CFR §503.45(a)(1), an instrument that continuously measures and records the total hydrocarbons concentration in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator. However, the frequency of monitoring requirement for total hydrocarbon concentration in §503.46(b) and the recordkeeping requirements for total hydrocarbon concentration in 503.47(c) and (n) do not apply if the following conditions are met:
 - 1. The exit gas from a sewage sludge incinerator stack is monitored continuously by carbon monoxide;
 - 2. The monthly average concentration of carbon monoxide in the exit gas from a sewage sludge incinerator stack, corrected to zero percent moisture and to seven percent oxygen, does not exceed 100 parts per million on a volumetric basis;
 - 3. The person who fires sewage sludge in a sewage sludge incinerator retains the following information for five years:
 - i. The carbon monoxide concentrations in the exit gas; and
 - A calibration and maintenance log for the instrument used to measure the carbon monoxide concentration.

Authority for Requirement: LCPH ATI 6532 / PTO 6411-R1

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
013	64.25	V	36	125	25,318	LCPH ATI 6532 / PTO 6411-R1

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 periodic monitoring requirements listed below.

Continuous Emissions Monitoring

Pollutant/Parameter:	CO	O_2				
Continuous Emissions Monitor ID:	ME013-1	ME013-2				
Operational Specifications:	40 CFR 503	40 CFR Part 60 Subpart O				
Ongoing System Calibration/Quality Assurance:	40 CFR 503	40 CFR Part 60, Subpart O				
Reporting & Recordkeepimg:	40 CFR 503	40 CFR Part 60, Subpart O				
Authority for Requirement:	LCPH ATI 6532 / PTO 6411-R1	LCPH ATI 6532 / PTO 6411-R1				

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

Opacity Monitoring

See Appendix D, Opacity Monitoring Summary. Authority for Requirement: 567 IAC 22.108(14)

Agency Approved Operation & Maintenance Plan Required? Facility Maintained Operation & Maintenance Plan Required?	Yes ☐ No ☐ Yes ☐ No ☐
(1) Refer to Appendix C, Facility O&M Plans, for the applicable require Compliance Assurance Monitoring (CAM) Plan Required?	rements. Yes No No
Authority for Requirement: 567 IAC 22.108(3)	

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Emission Point ID Number: 014

Associated Equipment

EP	EU	EU Description	Raw Material / Fuel	Rated Capacity	CE ID	CE Description
	013-1		Sludge	3.0 Dry ton/hr		
	015-1	Sludge Incinerator	Natural Gas	30.15 MMBtu/hr		
014	013-1B		Biogas	30.15 MMBtu/hr		
	300-1	Decant Tank #1	Wastewater	290,000 Gallons		
	300-2	Decant Tank #2	Wastewater	290,000 Gallons		

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
014	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 4459 / PTO 4516-R3

Operational Limits & Requirements

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

Operating Requirements with Associated Monitoring and Recordkeeping

Unless specified by a federal regulation, 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. This bypass can only be used during emergency (upset) conditions. All emergency bypass periods for the multiple hearth incinerator, including the date, time, duration, cause of the event, and a description of the product run at the time of the bypass (40 CFR §60.7(b)). Emissions from these emergency (upset) conditions must be quantified for EIQ purposes.

Authority for Requirement: LCPH ATI 4459 / PTO 4516-R3

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
014	63.5	V	60	1,200	PD	LCPH ATI 4459 / PTO 4516-R3

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: 015, 016, 017

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
015	015-1	Auxiliary Boiler #3	Natural Gas /	10.205		
013	013 013-1	Auxiliary Bolici #3	Biogas	MMBtu/hr		
016	016.1	A:1: D -:1 #2	Natural Gas /	18.844		
016	16 016-1	Auxiliary Boiler #2	Biogas	MMBtu/hr		
017	017.1	A:1: D -:1 #1	Natural Gas /	18.844		
017 01	017-1	Auxiliary Boiler #1	Biogas	MMBtu/hr		

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
	Opacity	20%	LCO Sec.10-60(a)	
015 016 017	PM	0.1 gr/dscf	LCO Sec. 10-62(a)(1) 567 IAC 23.3(2)"a"(2)	LCPH ATI 6073 / PTO 6157 LCPH ATI 5050 / PTO 5149-R1 LCPH ATI 5051 / PTO 5148-R1
		0.417 lb/MMBtu ⁽¹⁾	LCO Sec. 10-61(b)(2)	
	SO ₂	$500~\mathrm{ppm_v}$	LCO Sec. 10-65(a)(2) 567 IAC 23.3(3)"e"	
015		39.4 tpy		LCPH ATI 6073 / PTO 6157
016	SO_2	39.4 tpy ⁽²⁾		LCPH ATI 5050 / PTO 5149-R1
017	PM_{10}	0.14 lb/hr		LCPH ATI 5051 / PTO 5148-R1

⁽¹⁾ Limit for each boiler stack, EP015, EP016 and EP017, Auxiliary Boilers 1, 2 and 3.

Operational Limits & Requirements

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

NSPS Applicability

A. The New Source Performance Standards (NSPS), 40 CFR 60, Subpart A General Provisions and 40 CFR 60 Subpart Dc shall apply to this source pursuant to LCO Sec. 10-62(b)(64) and 567 IAC 23.1(2)"Ill".

Authority for Requirement: LCPH ATI 6073 / PTO 6157; LCPH ATI 5050 / PTO 5149-R1;

LCPH ATI 5051 / PTO 5148-R1

Operating Limits

- A. The owner or operator shall meet the applicable requirements of 40 CFR 60 §\$40c 48c [NSPS Subpart Dc] to comply with LCO Sec. 10-62(b)(64).
- B. Fuel in this boiler shall be limited to only natural gas or biogas or a combination of the two.
- C. The sulfur scrubber shall maintain effective removal efficiency for H₂S at a level no less than 99% during operation. The content of H₂S in the biogas shall be determined upstream and downstream of the sulfur scrubber in order to calculate the scrubber efficiency. Appropriate grab samples shall be collected at a minimum of 3 days a week.
- D. On occurrences where the sulfur scrubber efficiency is determined to be less than 99%, daily efficiency determinations shall be made and emissions calculated until an efficiency of 99% is maintained, except on weekends and holidays. On weekends and holidays, efficiency determinations and emissions shall be calculated on the next business day and daily thereafter during business days until an efficiency of 99% is maintained.
- E. During periods that the sulfur scrubber and/or associated equipment is taken offline for maintenance and/or repair, all biogas shall be directed through a flare. The boiler shall not be allowed to burn unscrubbed biogas.

Authority for Requirement: LCPH ATI 6073 / PTO 6157; LCPH ATI 5050 / PTO 5149-R1;

LCPH ATI 5051 / PTO 5148-R1

⁽²⁾ Limit is a combined limit for EP016 and EP017, Auxiliary Boilers 1 and 2.

Operating Condition 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. Recordkeeping and reporting for NSPS Subpart Dc shall be done in accordance with 40 CFR §60.48c.
- B. Calculate and record the H₂S removal efficiency of the sulfur scrubber for each sampling event required in the operating limit section.
- C. Maintain records of H₂S analyses obtained from biogas sampling required in the operating limit section.
- D. Calculate and record monthly SO₂ emissions from this emission unit on a 12-month rolling sum while burning biogas.

Authority for Requirement: LCPH ATI 6073 / PTO 6157; LCPH ATI 5050 / PTO 5149-R1; LCPH ATI 5051 / PTO 5148-R1

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
015	48.8	V	20	500	4,150	LCPH ATI 6073 / PTO 6157
016	61.3	V	42	600	4,500	LCPH ATI 5050 / PTO 5149-R1
017	61.3	V	42	600	4,500	LCPH ATI 5051 / PTO 5148-R1

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

Opacity Monitoring

Emission Point Characteristics

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

See Appendix D, Opacity Monitoring Summary. 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 Ye

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Emission Point ID Number: 021, 022, 034

Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
021	021-1	Alkaline Stabilization Silo #1 (East)	Lime	25.9 ton/hr	021-1	Baghouse
022	022-1	Alkaline Stabilization Silo #2 (West)	Lime	25.9 tons/hr	022-1	Baghouse
034	034-1	CAS/NAS Silo (North)	Lime	25 tons/hr	034-1	Baghouse

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
021	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 6035 / PTO 6103
022	DM	0.1 am/daaf	LCO Sec. 10-62(a)(1)	LCPH ATI 6035 / PTO 6103
034	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2)	LCFH ATT 0030 / PTO 0104

Operational Limits & Requirements

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

Control Device

A baghouse shall be used to control particulate emissions. The control equipment shall be maintained on this source in a good operating condition at all times.

Authority for Requirement: LCPH ATI 6035 / PTO 6103; LCPH ATI 6036 / PTO 6104

Operating Condition 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

- A. The owner or operator shall monitor and record "no visible emissions" observations each time the silo is filled. An exceedance of "no visible emissions" will require the owner/operator to promptly investigate the emission unit, make corrections to operations or equipment associated with the exceedance, and record the corrective action taken
- B. Records of all maintenance and repair completed on the control device

Authority for Requirement: LCPH ATI 6035 / PTO 6103; LCPH ATI 6036 / PTO 6104

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
021	46	V	11 x 10	Ambient	880	LCPH ATI 6035 / PTO 6103
022	46	V	11 x 10	Ambient	880	LCPH ATI 6036 / PTO 6104

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.

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Opacity Monitoring See Appendix D, Opacity Monitoring Summary. 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

<u>Monitoring Requirements</u>

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

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Emission Point ID Number: 036, 037, 040, 041

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
036	036-1	Standby Generator (Main Lift)	Diesel	108.3 gallons/hr	036-1	DOC
037	037-1	Standby Generator (Solids Dewatering)	Diesel	108.3 gallons/hr	037-1	DOC
040	040-1	Standby Generator (#3N Final Lift)	Diesel	115.7 gallons/hr	040-1	DOC
041	041-1	Standby Generator (#7S Final Lift)	Diesel	115.7 gallons/hr	041-1	DOC

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement
036	Opacity	20%	LCO Sec.10-60(a)	LCPH ATI 1946 / PTO 1912
037	DM	0.1 an/daaf	LCO Sec. 10-62(a)(1)	LCPH ATI 6037 / PTO 6113
040	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"(2)	LCPH ATI 2782 / PTO 2772
041	SO_2	1.5 lb/MMBtu	LCO Sec. 10-65(a)(1)(b)	LCPH ATI 2781 / PTO 2773

Operational Limits & Requirements

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

Operating Limits

- A. This source shall be limited to 700 hours of operation per year calculated on a 12-month rolling total basis.
- B. Fuel use in this unit shall be either #1 or #2 grade diesel fuel only with a maximum concentration of 15 ppm sulfur by weight per 40 CFR §80.510(b).

Authority for Requirement: LCPH ATI 1946 / PTO 1912; LCPH ATI 6037 / PTO 6113 LCPH ATI 2782 / PTO 2772; LCPH ATI 2781 / PTO 2773

Operating Condition 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

The following records shall be maintained:

- A. Total hours of engine operation per year calculated on a 12-month rolling total basis.
- B. The owner or operator shall obtain a fuel certification from the fuel supplier that states all diesel shipments will meet the specifications of 40 CFR §80.510(b) on an annual basis.

Authority for Requirement: LCPH ATI 1946 / PTO 1912; LCPH ATI 6037 / PTO 6113 LCPH ATI 2782 / PTO 2772; LCPH ATI 2781 / PTO 2773

NESHAP Applicability

These non-emergency engines are subject to 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). According to 40 CFR §63.6590(a)(1)(iii) these non-emergency compression ignition emergency engines, located at an area source, are existing stationary RICE as they were constructed prior to June 12, 2006.

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Compliance Date

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

Emission Standards:

According to 40 CFR §63.6603(a) and Table 2d, you must comply with the following emission standards:

- 1. Limit concentration of CO to 23 ppmvd or less at 15 percent O₂; or
- 2. Reduce CO emissions by 70 percent or more.

Operating Limits:

According to 40 CFR §63.6603(a) and Table 2b, you must comply with the following operating limits if you use an oxidation catalyst system:

- 1. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst that was measured during the initial performance test; and
- 2. Maintain the temperature of the engine exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

Fuel Requirements: (for diesel CI engines with a displacement of < 30 liters / cylinder)

You must use diesel fuel that meets the requirements in 40 CFR §80.510(b) for nonroad diesel fuel. Those requirements include a maximum sulfur content of 15 ppm (0.0015%) by weight and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. 40 CFR §63.6604(a).

Testing and Compliance Requirements:

- 1. According to 40 CFR §63.6612(a), you must conduct the initial performance tests or other applicable initial compliance demonstrations in Tables 4 and 5 to subpart ZZZZ no later than 180 days after the compliance date (or October 30, 2013).
- 2. You must demonstrate initial compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR §63.6630(a), (b), and (c).
- 3. According to 40 CFR §63.6615 and Table 3 to subpart ZZZZ, you must conduct subsequent performance tests every 8,760 hours or 3 years, whichever comes first for RICE that are not limited use stationary RICE. Stationary RICE that are limited use stationary RICE must conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first.
- 4. You must conduct the performance testing in accordance with 40 CFR §63.6620 to demonstrate compliance with applicable emission standards. You are required to notify the DNR 60 days prior to the test date and are required to submit a stack test report to the LCPH within 60 days after the completion of the testing.
- 5. If you are required to install a continuous parameter monitoring system (CPMS) as specified in Table 5 of subpart ZZZZ, you must install, operate, and maintain the CPMS according to the requirements in 40 CFR §63.6625(b).
- 6. If your engine is not equipped with a closed crankcase ventilation system, you must comply with requirements in 40 CFR §63.6625(g) for operating and maintaining the engine's crankcase ventilation system.
- 7. According to 40 CFR §63.6625(h) and Table 2d, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission standards apply.
- 8. You must demonstrate continuous compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR §§63.6605, 6635, and 6640(a), (b), and (e).

Notification, Reporting, and Recordkeeping Requirements

- 1. You must comply with the applicable notification requirements in pursuant to 40 CFR §63.6645(a), (g), (h), and (i).
- 2. You must comply with the applicable reporting requirements in pursuant to 40 CFR \$63.6650(a) to (f).
- 3. You must comply with the applicable recordkeeping requirements in pursuant to 40 CFR §63.6655(a), (b), and (d), and 40 CFR §63.6660, including keeping records for at least 5 years.

Authority for Requirement: 40 CFR 63 Subpart ZZZZ; 567 IAC 23.1(4)"cz"; LCO Sec. 10-62(d)(104)

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
036	16	V	14	904	5,413	LCPH ATI 1946 / PTO 1912
037	16.75	V	14	904	5,413	LCPH ATI 6037 / PTO 6113
040	20.25	V	16	961	14,310	LCPH ATI 2782 / PTO 2772
041	20.25	V	16	961	14,310	LCPH ATI 2781 / PTO 2773

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.

Stack Testing (EPs 036, 037, 040 and 041)

Refer to Appendix E, Stack Testing, for the applicable requirements.

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)	

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Emission Point ID Number: 042, 043

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
042	042-1	Standby Generator – North	Natural Gas	14.959 MMBtu/hr	042-1	OC
043	043-1	Standby Generator – South	Natural Gas	14.959 MMBtu/hr	043-1	OC

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement			
	Opacity	20%	LCO Sec.10-60(a)				
	PM/PM ₁₀	0.15 lb/hr					
	50	500	LCO Sec. 10-65(a)(2)				
	SO_2	500 ppm _v	567 IAC 23.3(3)"e"				
042	NO _x	1.0 g/HP-hr or 82		LCPH ATI 6590 / PTO 6454			
043	NOx	ppmvd at 15% O ₂		LCPH ATI 6591 / PTO 6455			
	VOC	0.7 g/HP-hr or 60	LCO Sec. 10-62(b)(78)				
	VOC	ppmvd at 15% O ₂ ⁽¹⁾	567 IAC 23.1(2)"yyy"				
	СО	2.0 g/HP-hr or 270					
		ppmvd at 15% O ₂					

⁽¹⁾ For purposes of NESHAP Subpart JJJJ, when calculating emissions of VOC, emissions of formaldehyde should not be included.

Operational Limits & Requirements

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

Control Equipment

An oxidation catalyst shall be installed to control CO emissions. The control equipment shall be maintained properly and operated at all times the air pollution source is in operation. All appropriate probes, monitors and gauges needed to measure the parameters outlined in condition "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 6590 / PTO 6454; LCPH ATI 6591 / PTO 6455

NSPS and NESHAP Applicability

- A. The New Source Performance Standards (NSPS) *Subpart A, General Provisions and Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines* shall apply to this source pursuant to LCO Sec. 10-62(b)(78) and 567 IAC 23.1(2)"zzz".
- B. The National Emission Standards for Hazardous Air Pollutants (NESHAP) Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines shall apply to this source pursuant to LCO Sec. 10-62(d)(104) and 567 IAC 23.1(4)"cz". Pursuant to 40 CFR \$63.6590(c)(1) this emission unit must meet the requirements of 40 CFR Part 63 subpart ZZZZ by meeting the requirements of 40 part 60 subpart JJJJ.

Authority for Requirement: LCPH ATI 6590 / PTO 6454; LCPH ATI 6591 / PTO 6455

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Operating Limits

- A. The owner or operator shall meet the applicable General Provisions requirements of 40 CFR 60 (Subpart A) as indicated in 40 CFR §60.4246 to comply with LCO Sec. 10-62(b).
- B. The owner or operator shall meet the Emission Standards and Other Requirements for Owners and Operators requirements of 40 CFR §60.4233 through §60.4235 (NSPS Subpart JJJJ) to comply with LCO Sec. 10-62(b)(78).
- C. The owner or operator shall comply with the Compliance Requirements for Owners and Operators of 40 CFR §60.4243 (NSPS Subpart JJJJ) to comply with LCO Sec. 10-62(b)(78).
- D. The standby stationary reciprocating internal combustion engine (RICE) shall operate no more than 700 hours based on a rolling 12-month total basis.
- E. The standby stationary RICE shall be fired by natural gas only.
- F. The control equipment on this emission unit shall be maintained according to the manufacturer's specifications and good operating practices.

Authority for Requirement: LCPH ATI 6590 / PTO 6454; LCPH ATI 6591 / PTO 6455

Operating Condition Monitoring and Recordkeeping

Unless specified by a federal regulation, 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives. Records shall be legible and maintained in an orderly manner. These records shall show the following:

- A. The owner or operator shall comply with the Notification, Reports, and Records for Owners and Operators of 40 CFR §60.4245.
- B. The owner or operator shall record the total hours of operation (in hours/month) for each month of operation for the first twelve (12) months of operation.
- C. The owner or operator shall record the cumulative hours of operation (in hours/year) on a rolling 12-month basis for each month of operation after the first twelve (12) months of operation.
- D. The owner or operator shall maintain a record of all maintenance completed on the control equipment. Authority for Requirement: LCPH ATI 6590 / PTO 6454; LCPH ATI 6591 / PTO 6455

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
042	18	V	17	974	11,846	LCPH ATI 6590 / PTO 6454
043	18	V	17	974	11,846	LCPH ATI 6591 / PTO 6455

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)	

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Emission Point ID Number: 045

Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
0.45	045-1	MBS Tank - North	MBS	5,875 gallons		
045	045-2	MBS Tank - South	MIDS	5,875 gallons		

Applicable Requirements

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

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

EP Pollutant Emission Lin		Emission Limit(s)	Authority for Requirement
045	SO2	3.67 lb/hr	LCPH ATI 6999 / PTO 6766

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
045	9	D	4	Ambient	13	LCPH ATI 6999 / PTO 6766

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)	

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Emission Point ID Number: 046

Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
046	046-1	Chlorine Building	Chlorine	0.2209 lb/hr	046-1	Dry Scrubber

Applicable Requirements

Operating Requirements with Associated Monitoring and Recordkeeping

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

- A. The dry scrubber (CE046-1) associated with this equipment shall be maintained according to the manufacturer's recommendations and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the dry scrubber.
- B. The owner or operator shall report any emergency dry scrubber (CE046-1) use to Linn County Public Health as an excess emission, per LCO Sec. 10-67. The owner or operator shall maintain records of the date, time, and calculated amount of emissions associated with chlorine releases when they occur.

Authority for Requirement: LCPH ATI 7081 / PTO 6926

Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.) Temp (°F)		Flowrate (acfm)	Authority for Requirement	
046	13	V	16 x 24	50-100	4,000 scfm	LCPH ATI 7081 / PTO 6926	

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)	

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Emission Point ID Number: 050, 051, 052

Associated Equipment

EP	EU	EU Description	Raw	Rated Capacity	CE ID	CE Description			
		_	Material	- v		•			
	203-1A	Roughing Filter #1		80,875 lb-BOD/day	-				
	203-1B 203-2A	Roughing Filter #4		80,875 lb-BOD/day 80,875 lb-BOD/day	-				
		Roughing Filter #2			-				
	203-2B 203-5	Roughing Filter #3 PUF JXN Box		80,875 lb-BOD/day 600 acfm blower	-				
	203-3	Scum Box and AE JXN		000 aciiii biower	-				
	203-6	Box		600 scfm blower					
	203-7	Primary Clarifier A-1		24,000 gal/day-ft					
	203-8	Primary Clarifier A-2		24,000 gal/day-ft					
	203-9	Primary Clarifier A-3		24,000 gal/day-ft					
	203-10	"A" DAF Thickener Overflow		44,870 lb/day					
	203-11	"B" DAF Thickener Overflow		68,904 lb/day		Biotrickling Filter Packed Bed Scrubber Packed Bed Scrubber			
	203-12	"C" DAF Thickener Overflow		44,870 lb/day					
	203-13	Gravity Belt Thickener #1	Air	3,600 lb/hr	050-1				
050	203-14	Gravity Belt Thickener #2		3,600 lb/hr					
051 052	203-15	Gravity Belt Thickener #3		2,800 lb/hr	051-1 052-1				
032	203-16	Gravity Belt Thickener Overflow Wet Well		100 scfm blower	032 1				
	203-17	Anaerobic Pretreatment Preacidification Tank		683,792 gallons					
	203-18	Anaerobic Pretreatment Reactor #1		159,870 lb-COD/day					
	203-19	Anaerobic Pretreatment Reactor #2		159,870 lb-COD/day					
	203-20	Anaerobic Pretreatment Reactor #3		159,870 lb-COD/day					
	203-21	Anaerobic Pretreatment Storage Tank		350,000 gallons					
	203-22	Anaerobic Pretreatment Standpipe		2,300 gallons					
	203-23	Anaerobic Pretreatment Vacuum Compressor		168 cfm @ 22" Hg					
	203-24	Anaerobic Pretreatment Sulfur Settling Tank		2,730 gallons					
	203-25	Roughing Filter Effluent Junction Box		200 scfm blower					

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement
050			LCPH ATI 7037-R1
051	H_2S	9.4 tpy ⁽¹⁾	LCPH ATI 7038
052			LCPH ATI 7039

⁽¹⁾ This limit includes emissions from EP050, EP051, and EP052.

Operational Limits & Requirements

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

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:

EP050

- A. The biotrickling filter (CE050-1) shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the control equipment associated with this emission point.
- B. The normal operating pH range for the biotrickling filter (CE050-1) shall be maintained between 1.8 and 3.0 S.U. The owner or operator shall monitor and record the pH in the biotrickling filter on a weekly basis.
- C. Wash cycles in the biotrickling filter (CE050-1) shall be performed at a minimum of once every two hours. The owner or operator shall monitor and record the wash cycle times.

Authority for Requirement: LCPH ATI 7037-R1

EP051

- A. The packed bed scrubber (CE051-1) shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the control equipment associated with this emission point.
- B. The normal operating pH range for the packed bed scrubber (CE051-1) shall be maintained between 1.5 and 6 S.U. The owner or operator shall monitor and record the pH in the packed bed scrubbers continuously.
- C. Wash cycles in the packed bed scrubber (CE051-1) shall be performed at a minimum of once every two hours. The owner or operator shall monitor and record the wash cycle times.
- D. Nozzles and associated spray patterns shall be inspected monthly. Any necessary repairs or adjustments shall be completed within five (5) days of discovery. The owner or operator shall maintain a log, which shall include: records the date and time of the monthly inspections; and the date and description of maintenance, repairs, and/or spray pattern adjustments.

Authority for Requirement: LCPH ATI 7038

EP052

- A. The packed bed scrubber (CE052-1) shall be maintained according to the manufacturer's specifications and good operating practices. The owner or operator shall record the date and description of all maintenance completed on the control equipment associated with this emission point.
- B. The normal operating pH range for the packed bed scrubber (CE052-1) shall be maintained between 1.5 to 6 S.U. The owner or operator shall monitor and record the pH in the packed bed scrubbers continuously.
- C. Wash cycles in the packed bed scrubber (CE052-1) shall be performed at a minimum of once every two hours. The owner or operator shall monitor and record the wash cycle times.
- D. Nozzles and associated spray patterns shall be inspected monthly. Any necessary repairs or adjustments shall be completed within five (5) days of discovery. The owner or operator shall maintain a log, which shall include: records the date and time of the monthly inspections; and the date and description of maintenance, repairs, and/or spray pattern adjustments.

Authority for Requirement: LCPH ATI 7039

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Emission Point Characteristics

The emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
050	42.9	V	48	Ambient	25,250	LCPH ATI 7037-R1
051	32	V	60	70-90	30,000 – 60,000 ⁽¹⁾	LCPH ATI 7038
052	32	V	60	70-90	30,000 – 60,000 ⁽¹⁾	LCPH ATI 7039

⁽¹⁾ Varies to maintain constant pressure drop across bioscrubber #1

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.

Stack Testing (EPs 050, 051, and 052)

Refer to Appendix E, Stack Testing, for the applicable requirements.

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)	

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Emission Point ID Number: 053, 054

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
053	053-1	Evenes Diagos Elema	Diagos/Mathana	0.071 MMCF/hr	052 1	Sulfur Scrubber
054	033-1	Excess Biogas Flare	Biogas/Methane	0.071 MMCF/hr	053-1	Sullur Scrubber

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement	
	Opacity	20%	LCO Sec.10-60(a)		
	PM	0.1 am/daaf	LCO Sec. 10-62(a)(1)		
	PIVI	0.1 gr/dscf	567 IAC 23.3(2)"a"(2)	I ODII ATI 5070 / DTO (105	
052	PM_{10}	0.384 lb/hr			
053 054	0.0	500 ppm _v	LCO Sec. 10-65(a)(2) 567 IAC 23.3(3)"e"	LCPH ATI 5878 / PTO 6105 LCPH ATI 5879 / PTO 6106	
	SO_2	4.69 lb/hr;			
		39.4 tpy ⁽¹⁾			
	NO _x 5.058 lb/hr				

⁽¹⁾ Aggregated SO₂ emissions from EP013, EP053, EP054 and EP056 shall not exceed the 39.4 tons per 12-month rolling total limit from the burning of biogas fuel.

Operational Limits & Requirements

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

Control Devices

A sulfur scrubber has been installed upstream of the flare to remove 99% of the hydrogen sulfide (H_2S) content from the biogas and hence reduce SO_2 emissions during incineration. The sulfur scrubber shall be maintained in a good operating condition at all times. All appropriate probes, monitors, and gauges needed to measure the parameters outlined in "Operating Condition Monitoring and Recordkeeping" shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5878 / PTO 6105; LCPH ATI 5879 / PTO 6106

Operating Limits

- A. The sulfur scrubber shall maintain effective removal efficiency for H₂S at a level no less than 99% during operation. The content of H₂S in the biogas shall be determined upstream and downstream of the sulfur scrubber in order to calculate the scrubber efficiency. Appropriate grab samples shall be collected at a minimum of 3 days a week.
- B. On occurrences where the sulfur scrubber efficiency is determined to be less than 99%, daily efficiency determination shall be made and emissions calculated until an efficiency of 99% is maintained, except on weekends and holidays. On weekends and holidays, efficiency determinations and emissions shall be calculated on the next business day and daily thereafter during business days until an efficiency of 99% is maintained.
- C. During periods that the sulfur scrubber and/or associated equipment is taken offline for maintenance and/or repair, all unscrubbed biogas shall be directed through the emergency biogas flare (EP056). The H₂S content of the biogas shall be determined on a daily basis and SO₂ emissions calculated. Due to employee safety considerations during bio-gas sample collection, H₂S content of unscrubbed biogas shall be assumed to be monthly average un-scrubbed H₂S content. SO₂ emissions would be calculated daily based on the monthly average un-scrubbed H₂S content.
- D. Inlet scrubber H₂S concentration not to exceed 2% on a twelve-month rolling average.
- E. Fuel for this unit shall be limited to biogas and/or natural gas or liquid propane.

Authority for Requirement: LCPH ATI 5878 / PTO 6105; LCPH ATI 5879 / PTO 6106

Operating Condition 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

The following information shall be monitored and recorded:

- A. Daily biogas flow rate to flare
- B. Total monthly biogas production.
- C. 12-month rolling total biogas production.
- D. H₂S analyses obtained from biogas sampling.
- E. H₂S content of inlet gas based on a twelve-month rolling average
- F. H₂S removal efficiency of the sulfur scrubber for each sampling event.
- G. Daily liquor feed rate through sulfur scrubber in gallons per minute.
- H. Continuous recording of pH of the sulfur scrubber liquor to regulate the NaOH make-up feed rates to the scrubber.
- Aggregated 12-month rolling total SO₂ emissions for EP013, EP053, EP054 and EP056 from the burning of biogas fuel.
- J. Records of all maintenance and/or repair completed on the control device

Authority for Requirement: LCPH ATI 5878 / PTO 6105; LCPH ATI 5879 / PTO 6106

Reporting Requirements

The following information shall be submitted to this department on a semi-annual basis:

A. Submit a semi-annual report on March 31^{st} (for 7/1 - 12/31 of the previous calendar year) and September 30^{th} (for 1/1 - 6/30 of the current year) summarizing the SO_2 emissions generated from the combustion of biogas through EP-013, EP-053, EP-054 and EP-056.

Authority for Requirement: LCPH ATI 5878 / PTO 6105; LCPH ATI 5879 / PTO 6106

Emission Point Characteristics

The emission point shall conform to the specifications listed below.

ЕР	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
053	25	V	8	> 1,000	1,345	LCPH ATI 5878 / PTO 6105
054	25	V	8	> 1,000	3,345	LCPH ATI 5879 / PTO 6106

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

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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)	

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Emission Point ID Number: 056

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
056	056-1	Emergency Biogas Flare	Methane	0.071 MMCF/hr	056-1	Flare

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	Authority for Requirement	
056	Opacity	20%	LCO Sec.10-60(a)		
	PM 0.1 gr/dscf		LCO Sec. 10-62(a)(1) 567 IAC 23.3(2)"a"(2)	LCPH ATI 5880 / PTO 6107	
	SO ₂	246.851 lb/hr; 39.4 tpy ⁽¹⁾			

⁽¹⁾ Aggregated SO₂ emissions from EP013, EP053, EP054 and EP056 shall not exceed the 39.4 tons per 12-month rolling total limit from the burning of biogas fuel.

Operational Limits & Requirements

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

Operating Limits

- A. This device shall not be operated for more than 152 hours per 12-month rolling period.
- B. Fuel for this unit shall be limited to biogas and/or natural gas or liquid propane.

Authority for Requirement: LCPH ATI 5880 / PTO 6107

Operating Condition 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 Linn County Air Quality Division and other federal or state air pollution regulatory agencies and their authorized representatives.

The following information shall be monitored and recorded:

- A. Records of all maintenance and repair completed on the emergency flare.
- B. Daily biogas flow rate to the emergency flare when operated.
- C. Record the number of hours of flare operation each month and calculate the 12-month rolling total.
- D. Monthly SO₂ emissions for the emergency flare.
- E. Aggregated 12-month rolling total SO₂ emissions for EP013, EP053, EP054 and EP056 from the burning of biogas fuel.

Authority for Requirement: LCPH ATI 5880 / PTO 6107

Reporting Requirements

The following information shall be submitted to this department on a semi-annual basis:

A. Submit a semi-annual report on March 31^{st} (for 7/1 - 12/31 of the previous calendar year) and September 30^{th} (for 1/1 - 6/30 of the current year) summarizing the SO_2 emissions generated from the combustion of biogas through EP013, EP053, EP054 and EP056.

Authority for Requirement: LCPH ATI 5880 / PTO 6107

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Emission Point Characteristics

This emission point shall conform to the specifications listed below.

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
056	27	V	12	> 1,000	4,167	LCPH ATI 5880 / PTO 6107

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)	

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Emission Point ID Number: 951

Associated Equipment

EP	EU	EU Description	Fuel	Rated Capacity	CE ID	CE Description
951	951-1	Emergency Generator (Return Sewer Pump Station)	Diesel	385 BHP 17.6 gallons/hour		

Applicable Requirements

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

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

EP	Pollutant	Emission Limit(s)	Authority for Requirement	
951	NMHC + NO	4.0 grams/kW-hr		
	$NMHC + NO_x$	(3.0 grams/HP-hr)		
	СО	3.5 grams/kW-hr	40 CFR §60.4205(b)	
		(2.6 grams/HP-hr)		
	PM	0.20 grams/kW-hr		
		(0.15 grams/HP-hr)		
	SO_2	1.5 lb/MMBtu	LCO Sec. 10-65(a)(1)(b)	
	Opacity	20%	LCO Sec. 10-60(a)	

Operational Limits & Requirements

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

Federal Standards

A. New Source Performance Standards (NSPS):

The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
951-1	A	General Conditions		10-62(b)	§60.1 – §60.19
	IIII	Standards of Performance for Stationary Compression Ignition	New Emergency	10-62(b)(77)	§60.4200 - §60.4219
		Internal Combustion Engines	Engine		

Authority for Requirement: Registration Permit CI 116

B. <u>National Emission Standards for Hazardous Air Pollutants (NESHAP):</u> The following subparts apply to the emission unit(s) in this permit:

EU ID	Subpart	Title	Туре	Local Reference (LCO Sec.)	Federal Reference (40 CFR)
951-1	ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	New Emergency Engine @ Area Source	10-62(d)(104)	§63.6580 - §63.6675

Authority for Requirement: Registration Permit CI 168

Below are the specific requirements outlined in the Compression Ignition Internal Combustion Engines <400 bhp Registration Permit for EP951. For a full explanation of all requirements and to view NSPS Subpart IIII in its entirety, please refer to the web link in Appendix A – Applicable Federal Standards.

Emission Standards for Owners and Operators

A. 2007 and later model year engines <u>must</u> be certified by the manufacturer to comply with the emission standards of Subpart IIII. These standards are summarized in Table A.

Authority for Requirement: Registration Permit CI 168

Fuel Requirements for Owners and Operators

A. Beginning October 1, 2010, engines must use a fuel that meets the following: 1) a maximum sulfur content of 15 ppm and 2) either a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume. Authority for Requirement: Registration Permit CI 168

Emergency Engine Requirements for Owners and Operators

- A. Owners and operators of an emergency CI engine must install a non-resettable hour meter prior to start-up of the engine.
- B. The engine may be operated for the purpose of maintenance checks and readiness testing a maximum of 100 hours/year. There is no time limit on use for emergency situations.
- C. Operation other than for emergency operation and maintenance checks and readiness testing as permitted is prohibited
- D. Owners and operators of an emergency engine must keep records of all operation of the engine. The owner must record the time of operation of the engine and the reason the engine was in operation.

Authority for Requirement: Registration Permit CI 168

Summary of Compliance Requirements for Owners and Operators

- A. Owners and operators must meet the applicable emission standards listed in Table A. The engine must be installed and configured according to the manufacturer's specifications.
- B. Owner and operators must operate and maintain the CI engines according to manufacturer's written procedures for the life of the engine to maintain compliance with the emission standards.

Authority for Requirement: Registration Permit CI 168

Table A. Emission Standards for 2007 Model Year and Later Emergency Engines that are **NOT**Fire Pumps

(based on 40 CFR §89.112)

Limits in grams/kW-hr (grams/hp-hr)

Maximum Engine Power	Model Year(s)	NMHC + NO _x	СО	PM
$130 \le kW < 300$ $(175 \le hp < 400)$	2008-2011	4.0 (3.0)	3.5 (2.6)	0.20 (0.15)

Authority for Requirement: Registration Permit CI 168

Monitoring Requirements

The owner/operator of this equipment shall comply with the periodic 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)

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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 and Linn County Code of Ordinance (LCO) Chapter 10 – Environment, Article III, Sec. 10-57.

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 Linn County Public Health Air Quality Division. 567 IAC 22.108 (15)"e"

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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 Linn County Public Health Air Quality Division. 567 IAC 22.108 (5)

G6. Annual Fee

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

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

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

- 1. Enter upon the permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- 2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
- 4. Sample or monitor, at reasonable times, substances or parameters for the purpose of ensuring compliance with the permit or other applicable requirements. 567 IAC 22.108 (15)"b" and LCO Sec. 10-75

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" and LCO Sec. 10-71 and 10-72

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) and LCO Sec. 10-67(b)

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G10. Recordkeeping Requirements for Compliance Monitoring

- 1. In addition to any source specific recordkeeping requirements contained in this permit, the permittee shall maintain the following compliance monitoring records, where applicable:
 - a. The date, place and time of sampling or measurements
 - b. The date the analyses were performed.
 - c. The company or entity that performed the analyses.
 - d. The analytical techniques or methods used.
 - e. The results of such analyses; and
 - f. The operating conditions as existing at the time of sampling or measurement.
 - g. The records of quality assurance for continuous compliance monitoring systems (including but not limited to quality control activities, audits and calibration drifts.)
- 2. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least 5 years from the date of compliance monitoring sample, measurement report or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous compliance monitoring, and copies of all reports required by the permit.
- 3. For any source which in its application identified reasonably anticipated alternative operating scenarios, the permittee shall:
 - a. Comply with all terms and conditions of this permit specific to each alternative scenario.
 - b. Maintain a log at the permitted facility of the scenario under which it is operating.
 - c. Consider the permit shield, if provided in this permit, to extend to all terms and conditions under each operating scenario. 567 IAC 22.108(4), 567 IAC 22.108(12)

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

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

- 1. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred at a source:
 - a. A monitoring method approved for the source and incorporated in an operating permit pursuant to 567 Chapter 22:
 - b. Compliance test methods specified in 567 Chapter 25; or
 - c. Testing or monitoring methods approved for the source in a construction permit issued pursuant to 567 Chapter 22.
- 2. The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a. Any monitoring or testing methods provided in these rules; or
 - b. Other testing, monitoring, or information gathering methods that produce information comparable to that produced by any method in subrule 21.5(1) or this subrule. 567 IAC 21.5(1)-567 IAC 21.5(2) and LCO Sec. 10-69(1)

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

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

2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
 - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
 - ii. The estimated quantity of the excess emission.
 - iii. The time and 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) and LCO Sec. 10-67
- 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

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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) This notification must be made to Linn County Air Quality Division, in lieu of the Department, upon adoption of the NSPS or NESHAP into Chapter 10.

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)

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- 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) and LCO Sec. 10-58

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 LCO Sec. 10-63.

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.

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

G24. Permit Reopenings

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 22.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.
 - a. Reopening and revision on this ground is <u>not</u> required if the permit has a remaining term of less than three years;
 - b. Reopening and revision on this ground is <u>not</u> required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
 - c. Reopening and revision on this ground is <u>not</u> required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 22.108(17)"a", 567 IAC 22.108(17)"b"
- 3. A permit shall be reopened and revised under any of the following circumstances:
 - a. The department receives notice that the administrator has granted a petition for disapproval of a permit pursuant to 40 CFR 70.8(d) as amended to July 21, 1992, provided that the reopening may be stayed pending judicial review of that determination;
 - b. The department or the administrator determines that the Title V permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Title V permit;
 - c. Additional applicable requirements under the Act become applicable to a Title V source, provided that the reopening on this ground is not required if the permit has a remaining term of less than three years, the effective date of the requirement is later than the date on which the permit is due to expire, or the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. Such a reopening shall be complete not later than 18 months after promulgation of the applicable requirement.
 - d. Additional requirements, including excess emissions requirements, become applicable to a Title IV affected source under the acid rain program. Upon approval by the administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - e. The department or the administrator determines that the permit must be revised or revoked to ensure compliance by the source with the applicable requirements. 567 IAC 22.114(1)
- 4. Proceedings to reopen and reissue a Title V permit shall follow the procedures applicable to initial permit issuance and shall effect only those parts of the permit for which cause to reopen exists. 567 IAC 22.114(2)
- 5. A notice of intent shall be provided to the Title V source at least 30 days in advance of the date the permit is to be reopened, except that the director may provide a shorter time period in the case of an emergency. 567 IAC 22.114(3) **G25. Permit Shield**
- 1. The director may expressly include in a Title V permit a provision stating that compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that
 - a. Such applicable requirements are included and are specifically identified in the permit; or b. The director, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the permit includes the determination or a concise summary thereof.

- 2. A Title V permit that does not expressly state that a permit shield exists shall be presumed not to provide such a shield.
- 3. A permit shield shall not alter or affect the following:
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the administrator under that section;
 - b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the Act;
 - d. The ability of the department or the administrator to obtain information from the facility pursuant to Section 114 of the Act. 567 IAC 22.108 (18)

G26. Severability

The provisions of this permit are severable and if any provision or application of any provision is found to be invalid by this department or a court of law, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected by such finding. 567 IAC 22.108 (8) and LCO Sec. 1-7

G27. Property Rights

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

G28. Transferability

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

G29. Disclaimer

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

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

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

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

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

567 IAC 25.1(7)"a", 567 IAC 25.1(9) and LCO Sec. 10-70

G31. Prevention of Air Pollution Emergency Episodes

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

G32. Contacts List

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

Iowa Compliance Officer

Air Branch

Enforcement and Compliance Assurance Division

U.S. EPA Region 7

11201 Renner Blvd.

Lenexa, KS 66219

(913) 551-7020

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

Chief, Air Quality Bureau

Iowa Department of Natural Resources

Wallace State Office Building

502 E 9th St.

Des Moines, IA 50319-0034

(515) 725-8200

Reports or notifications to the Linn County local program shall be directed to the supervisor at the Linn County local program. The current address and phone number is:

Linn County Public Health

Air Quality Branch 1240 26th Avenue Ct SW Cedar Rapids, IA 52404 (319) 892-6000

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V. APPENDIX A – Applicable Federal Standards

40 CFR 60 Subpart A – General Provisions

<u>40 CFR 60 Subpart Dc</u> – Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units

40 CFR 60 Subpart O – Standards of Performance for Sewage Treatment Plants

<u>40 CFR part 60 Subpart JJJJ</u> - Standards of Performance for Stationary Spark Ignition Internal Engines

A listing of all the promulgated NSPS rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each NSPS can be found at the link below: https://www.epa.gov/caa-permitting/new-source-performance-standards-region-7

40 CFR 61 Subpart A – General Provisions

40 CFR 61 Subpart E – National Emission Standard for Mercury

A listing of all the promulgated NESHAP rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each NESHAP can be found at the link below: https://www.epa.gov/caa-permitting/national-emission-standards-hazardous-air-pollutants-region-7

<u>40 CFR 62 Subpart LLL</u> - Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or Before October 14, 2010

40 CFR 63 Subpart A – General Provisions

<u>40 CFR 63 Subpart ZZZZ</u> – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

A listing of all the promulgated MACT rules, EPA Region 7 staff contact information (for questions pertaining to the rule), compliance assistance links and a link to each MACT can be found at the link below: https://www.epa.gov/caa-permitting/maximum-achievable-control-technology-standards-region-7

40 CFR 503 Subchapter O – Sewage Sludge – Standards for the Use or Disposal of Sewage Sludge

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V. APPENDIX C – Facility O&M Plans Summary

The following emission units are subject to a facility O&M plan:

EP	EU ID	Description	
013	013-1	Sludge Incinerator – Natural Gas Combustion	
	013-1B	Sludge Incinerator – Biogas Combustion	

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

The data pertaining to the plan shall be maintained on site for at least 5 years. The plan and associated recordkeeping provides documentation of this facility's implementation of its obligation to operate according to good air pollution control practice.

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

Authority for Requirement: 567 IAC 22.108(3)

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V. APPENDIX D – Opacity Monitoring Summary

Opacity Monitoring:

The facility shall check the opacity weekly during a period when the emission unit associated with the emission point listed in Opacity Monitoring Table 1 is operating 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 required.

If an opacity >20 % is observed, this would be a violation 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.

Opacity Monitoring Table 1.

EP	EU ID	Description	
013	013-1	Sludge Incinerator – Natural Gas Combustion	
	013-1B	Sludge Incinerator – Biogas Combustion	
015	015-1	Auxiliary Boiler #3	
016	016-1	Auxiliary Boiler #2	
017	017-1	Auxiliary Boiler #1	
021	021-1	Alkaline Stabilization Silo #1 (East)	
022	022-1	Alkaline Stabilization Silo #2 (West)	
034	034-1	CAS/NAS Lime Silo (North)	

Authority for Requirement: 567 IAC 22.108(14)

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V. APPENDIX E – Stack Testing Summary

EP	EU Description	Pollutant	Compliance Methodology	Completion Deadline	Test Method
012	Biotrickling Filter #2	H_2S	Stack Test	See Footnote 1 See Footnote 2	40 CFR 60, Appendix A, Method 15
019	Solids Handling Odorous Air	H ₂ S	Stack Test	See Footnote 1 See Footnote 2	40 CFR 60, Appendix A, Method 15
036	Standby Generator (Main Lift)	СО	Stack Test	See Footnote 3 See Footnote 4	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
037	Standby Generator (Solids Dewatering)	СО	Stack Test	See Footnote 3	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
040	Standby Generator (#3N Final Lift)	СО	Stack Test	See Footnote 3	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
041	Standby Generator (#7S Final Lift)	CO	Stack Test	See Footnote 3	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
050	Biotrickling Filter	H_2S	Stack Test	See Footnote 5	40 CFR 60, Appendix A, Method 15
051	Bio-Scrubber #1	H_2S	Stack Test	See Footnote 6	40 CFR 60, Appendix A, Method 15
052	Bio-Scrubber #2	H_2S	Stack Test	See Footnote 6	40 CFR 60, Appendix A, Method 15

¹ Stack testing is required after each biotrickling filter media exchange and every five (5) years thereafter. An exchange of the biotrickling filter media will require an initial compliance demonstration and reset the periodic testing requirement of this permit.

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

Authority for Requirement – 567 IAC 22.108(3) (All)

Authority for Requirement – ATI 7047 (EP012)

Authority for Requirement – ATI 7048 (EP019)

Authority for Requirement - ATI 7037 (EP050)

² Biotrickling Filter #2 (EP012) and Solids Handling Odorous Air (EP019) are permitted under four operational scenarios: (1) odorous air treatment is evenly split between EP012 and EP019; (2) all odorous air is exhausted through EP012; (3) all odorous air is exhausted through EP019; and (4), most odorous air is exhausted through EP012 and only odorous air from the sludge storage tank (EU300-19) is exhausted through EP019. Engineering estimates indicate that hydrogen sulfide emissions from EP012 should be similar under operational scenarios 1, 2, and 4; however, under operational scenario 3, no hydrogen sulfide is expected to be emitted from EP012. Therefore, as engineering estimates for EP019 indicate the highest emissions from that emission point under scenario 4, stack testing to demonstrate compliance with the hydrogen sulfide emission limit shall be completed while the biotrickling filter is operating under scenario 4 at the same time as the EP019 compliance demonstration test.

³ Pursuant to §63.6612, the initial performance test must be conducted within 180 days after the compliance date that is specified in §63.6595 and according to the provisions in §63.7(a)(2) (Initial compliance tests were completed December 18-20, 2012).

⁴ Pursuant to Table 3 as referenced in §63.6615, subsequent performance tests must be conducted every 8,760 hours or 3 years, whichever comes first for each engine that is not a limited use stationary RICE. Any engine that is a limited use stationary RICE must conduct subsequent performance tests every 8,760 hours or 5 years, whichever comes first

⁵ Stack testing is required after each biotrickling filter media exchange and every five (5) years thereafter.

⁶ Stack testing is required after each bioscrubber media exchange and every five (5) years thereafter. An exchange of the bioscrubber media will require be treated as an initial compliance demonstration and reset the periodic testing requirement of this permit.

Authority for Requirement – ATI 7038 (EP051) Authority for Requirement – ATI 7039 (EP052) Authority for Requirement –567 IAC 23.1(4)"cz"; LCO Sec. 10-62(d)(104); 40 CFR 63 Subpart ZZZZ (EPs 0036, 037, 040, & 041)

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