# 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-001R3

**Expiration Date: August 14, 2029** 

Permit Renewal Application Deadline: February 14, 2029

**EIQ Number: 92-9044** 

Facility File Number: 57-01-077

#### **Responsible Official**

Name: Roy Hesemann

Title: Cedar Rapids Utilities Manager

Mailing Address: 1111 Shaver Road NE, Cedar Rapids, IA 52402

Phone #: (319) 286-5972

# **Permit Contact Person for the Facility**

Name: Justin Schroeder

Title: Environmental Manager, Utilities

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

Phone #: (319) 286-5948

Mainie Stein

This permit is issued in accordance with 567 Iowa Administrative Code Chapter 24 and is issued subject to the terms and conditions contained in this permit.

For the Director of the Department of Natural Resources

Marnie Stein, Supervisor of Air Operating Permits Section

Date

08/15/2024

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# **Abbreviations**

acfm	actual cubic feet per minute	lb/hr	pounds per hour
Amb.	ambient temperature	lb/MMBtu	pounds per million British thermal
ATI	authorization to install		units
BHP	brake horse power	LCPH	Linn County Public Health
bph	bushels per hour	LCCO	Linn County Code of Ordinances
bpy	bushels per year	MBS	magnesium bisulfite
Btu	British thermal units	Mcf/hr	thousand cubic feet per hour
CFR	Code of Federal Regulation	MMcf/hr	million cubic feet per hour
CI	compression ignition	MVAC	motor vehicle air conditioner
CE	control equipment	NAICS	North American Industry
CFH	cubic feet per hour		Classification System
CFM	cubic feet per minute	NESHAP	national emission standard for
°F	degrees Fahrenheit		hazardous air pollutants
D	downward	NSPS	new source performance standard
DOC	diesel oxidation catalyst	$ppm_{\rm v}$	parts per million by volume
dscfm	dry standard cubic feet per minute	PTO	permit to operate
EIQ	emissions inventory questionnaire	SI	spark ignition
EP	emission point	scfm	standard cubic feet per minute
EU	emission unit	SIC	standard Industrial Classification
GPH	gallons per hour	tph	tons per hour
gpm	gallons per minute	tpy	tons per year
gr/dscf	grains per dry standard cubic foot	USEPA	United States Environmental
H	horizontal		Protection Agency
IAC	Iowa Administrative Code	V	vertical, unobstructed
IDNR	Iowa Department of Natural		
	Resources		

# **Pollutants**

PM	particulate matter	As	arsenic
$PM_{10}$	particulate matter ten microns or	Be	beryllium
	less in diameter	Cd	cadmium
$PM_{2.5}$	particulate matter two point five	Cr	chromium
	microns and less in diameter	Hg	mercury
$SO_2$	sulfur dioxide	Ni	nickel
$NO_X$	nitrogen oxides	$H_2S$	hydrogen sulfide
VOC	volatile organic compound		
CO	carbon monoxide		
HAP	hazardous air pollutant		
SHAP	single hazardous air pollutant		
THAP	total hazardous air pollutant		
THC	total hydrocarbons		

# I. Facility Description and Equipment List

Facility Name: Cedar Rapids Water Pollution Control Facility

Permit Number: 05-TV-001R3

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

Table 1 – Equipment List

Emission	Emission Emission			LCPH
Point #	Unit #	Emission Unit Description	Permit #	Permit #
001	001-1	Main Lift Building (Dry Well)		4532 / 4753R4
003	001-1	Main Lift Building (Dry Well)		4714 / 4754R4
	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		
	300-12	Grit Hopper		
012	300-13	Solids Dewatering Building Manhole		7047R1 / 7208
	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	-	
	300-19	Storage Tank		
	300-20	Blend Tank #1		
	300-21	Blend Tank #2	-	
	300-22	Belt Filter Press #1	-	
	300-23	Belt Filter Press #2		
	013-1	Sludge Incinerator (Natural Gas)		
013	013-1B	Sludge Incinerator (Biogas)		6532 / 6411R2
013	300-1	Decant Tank #1		
	300-2	Decant Tank #2		
014	300-1	Decant Tank #1		4459 / 4516R3
014	300-2	Decant Tank #2		4439 / 4310K3
015	015-1	Auxiliary Boiler #3		6073 / 6157
016	016-1	Auxiliary Boiler #2		5050 / 5149
017	017-1	Auxiliary Boiler #1		5051 / 5148
	300-3	Centrifuge #1 Centrate		
	300-4	Centrifuge #1 Drop Hood		
	300-5	Centrifuge #2 Centrate		
	300-6	Centrifuge #2 Drop Hood		
019	300-7	Centrifuge Mezzanine (South)		7048 / 7204
	300-8	Centrifuge Mezzanine (North)		
	300-9	Solids Dewatering Building Operating Floor		
	300-10	Grit Room Exhaust		
	300-11	Stair Screen		

Emission Point #	Emission Unit #	Emission Unit Description	DNR Permit #	LCPH Permit #
	300-12	Grit Hopper		
	300-13	Solids Dewatering Building Manhole		
	300-14	Incinerator Manhole		
	300-15	High Pressure Pump #1		
	300-16	High Pressure Pump #2		
019	300-17	High Pressure Pump #3		7048 / 7204
	300-18	High Pressure Pump #4		/048 / /204
	300-19	Storage Tank		
	300-20	Blend Tank #1		
	300-21	Blend Tank #2		
	300-22	Belt Filter Press #1 (East)		
	300-23	Belt Filter Press #2 (West)		
021	021-1	Alkaline Stabilization Lime Silo #1		6035 / 6103
022	022-1	Alkaline Stabilization Lime Silo #2		6036 / 6104
034	034-1	CAS / NAS Limestone Silo – North		1313 / 1040
036	036-1	MCC1 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 – North		6590 / 6454
043	043-1	Standby Generator – South		6591 / 6544
	045-1	Magnesium Bisulfite (MBS) North Tank		
045	045-2	MBS South Tank		6999 / 6766
046	046-1	Chlorine Building		7081 / 6926
0.0	203-1A	Roughing Filter #1		70017.0920
	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		
	203-11	"C" DAF Thickener Overflow		
050	203-13	Gravity Belt Thickener #1		7037R1 / 7205
030	203-13	Gravity Belt Thickener #2	<del></del>	/03/K1//203
	203-14	Gravity Belt Thickener #2 Gravity Belt Thickener #3		
	203-16	Gravity Belt Thickener Overflow Wet Well		
	203-10	Anaerobic Pretreatment Preacidification Tank		
		Anaerobic Pretreatment Reactor #1		
	203-18			
	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 Setting Tank		
	203-25	Roughing Filter Effluent Junction Box		
051	203-1A	Roughing Filter #1		7038 / 7206R1

Emission Point #	Emission Unit #	Emission Unit Description	DNR Permit #	LCPH Permit #	
	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			
	203-12	"C" DAF Thickener Overflow			
051	203-13	Gravity Belt Thickener #1		7029 / 720CD	
051	203-14	Gravity Belt Thickener #2		7038 / 7206R	
	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			
	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			
	203-12	"C" DAF Thickener Overflow			
052	203-13	Gravity Belt Thickener #1		7039 / 7207R	
052	203-14	Gravity Belt Thickener #2		70357720710	
	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			
	203-16	Anaerobic Pretreatment Reactor #2			
	203-20	Anaerobic Pretreatment Reactor #2  Anaerobic Pretreatment Reactor #3			
	203-20	Anaerobic Pretreatment Storage Tank			
	203-21	Anaerobic Pretreatment Storage Tank  Anaerobic Pretreatment Standpipe			
	203-22				
		Anaerobic Pretreatment Vacuum Compressor			
	203 24	Angarchia Dratragtment Sulting Sattling Tank			
	203-24	Anaerobic Pretreatment Sulfur Settling Tank Roughing Filter Effluent Junction Box			

Emission Point #	Emission Unit #	Emission Unit Description	DNR Permit #	LCPH Permit #
054	053-1	Excess Biogas Flare (South)		5879 / 6106
056	056-1	Emergency Biogas Flare		5880 / 6107
951	951-1	Return Sewer Pump Station Emerg. Generator		CI168

**Table 2 – Insignificant Activities Equipment List** 

Emission Point #	Emission Unit #	Emission Unit Description	LCPH Permit #
002	002-11	Main Lift Carbon Scrubber	1177 / 2195
055	055-1 <sup>1</sup>	Aerobic Bioreactor	4702 / 6265
104	104-1	Diesel Tank (Main Lift)	
105	105-1	Diesel Tank (Solids)	
106	106-1	3N and 7S Diesel Storage Tank	
204	204-1	Space Heaters – Incineration (2)	
206	206-1	Space Heaters – Solids Pump (2)	
207	207-1	Air Makeup Units (10)	
208	208-1	Space Heaters – Centrifuge Building (6)	

<sup>&</sup>lt;sup>1</sup> The construction permit associated with this emission unit does not contain any specific terms or conditions; therefore, it qualifies as an insignificant activity per 567 IAC 24.103.

#### **II. Plant-Wide Conditions**

Facility Name: Cedar Rapids WPCF
Permit Number: 05-TV-001R3

Permit conditions are established in accordance with 567 Iowa Administrative Code (IAC) rule 24.108. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 IAC as amended February 2023, form the legal basis for the application requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix A.

#### **Permit Duration**

The term of this permit is: 5 years

Commencing on: August 15, 2024 Ending on: August 14, 2029

Amendments, modifications and reopenings of this permit shall be obtained in accordance with 567 IAC rules 24.110 – 24.114. Permits may be suspended, terminated, or revoked as specified in 567 IAC rules 24.115.

#### **Emission Limits**

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

Opacity (visible emissions): 40% opacity

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

Opacity (visible emissions): 20% opacity

Authority for Requirement: LCCO Sec. 10-60(a)

Sulfur Dioxide (SO2): 500 parts per million by volume (ppmv)

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

LCCO 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 (dscf) of exhaust gas, except as provided in 567—21.2(455B), 567—23.1(455B), 567—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 the equation provided in

23.3(2)"a"(2) 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 10-62-1 for the process weight rate allocated to such emission point. In any case, 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 or Table 10-62-1 of [LCCO Sec. 10-62(a)], whichever would result in the lowest allowable emission rate.

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

### **Fugitive Dust:**

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

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

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

#### **Regulatory Authority**

This facility is located in Linn County, Iowa. Linn County Public Health, 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 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 DNR. Stack test notifications and test results for tests required as periodic monitoring in the Title V permit shall be submitted to Linn County Public Health. Stack test protocols and test results conducted as required by a PSD permit shall be submitted to the DNR and Linn County Public Health Air Quality Division.

Authority for Requirement: 567 IAC 22.108

# 40 CFR NSPS Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units

The requirements of the NSPS in 40 CFR 60, Subpart Dc apply to the small industrial-commercial-institutional steam generating units at this source. Affected units at the facility are EU015-1 (Auxiliary Boiler #3), EU016-1 (Auxiliary Boiler #2), and EU017-1 (Auxiliary Boiler #1).

Authority for Requirement: 40 CFR Part 60, Subpart Dc

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

# 40 CFR NSPS Subpart O, Sewage Treatment Plants

The requirements of the NSPS in 40 CFR 60, Subpart O apply to the sewage treatment units at this source. Affected units at the facility are EU013-1 and EU013-1B (Sludge Incinerator).

Authority for Requirement: 40 CFR Part 60, Subpart O

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

#### 40 CFR NSPS Subpart IIII, Stationary Compression Ignition Internal Combustion Engines

The requirements of the NSPS in 40 CFR 60, Subpart IIII apply to the stationary compression ignition internal combustion engines at this source. Affected units at the facility are EUs 036-1 (MCC1 Standby Generator – Main Lift), 037-1 (Standby Generator – Solids Dewatering), 040-1 (Standby Generator #3N Final Lift), 041-1 (Standby Generator #7S Final Lift), and 951-1 (Return Sewer Pump Station Emergency Generator).

Authority for Requirement: 40 CFR Part 60, Subpart IIII

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

#### 40 CFR NSPS Subpart JJJJ, Stationary Spark Ignition Internal Combustion Engines

The requirements of the NSPS in 40 CFR 60, Subpart JJJJ apply to the stationary spark ignition internal combustion engines at this source. Affected units at the facility are EU042-1 (Standby Generator – North) and EU43-1 (Standby Generator – South).

Authority for Requirement: 40 CFR Part 60, Subpart JJJJ

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

#### 40 CFR NESHAP Subpart E, Mercury

The requirements of the NESHAP in 40 CFR 61, Subpart E apply. Affected units at the facility are EU013-1, and EU013-1B (Sludge Incinerator).

Authority for Requirement: 40 CFR Part 61, Subpart E

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

# 40 CFR Subpart LLL Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or before Oct. 14, 2010

The requirements of the NESHAP in 40 CFR 62, Subpart LLL apply to the sewage sludge incineration units at this source. Affected units at the facility are EU013-1, and EU013-1B (Sludge Incinerator).

Authority for Requirement: 40 CFR Part 62, Subpart LLL

567 IAC 23.1(5)"e"

# 40 CFR NESHAP Subpart ZZZZ, Stationary Reciprocating Internal Combustion Engines

The requirements of the NESHAP in 40 CFR 63, Subpart ZZZZ apply to the stationary reciprocating internal combustion engines at this source. Affected units at the facility are EUs 036-1 (MCC1 Standby Generator – Main Lift), 037-1 (Standby Generator – Solids Dewatering), Standby Generator #3N Final Lift), 041-1 (Standby Generator #7S Final Lift), EU042-1 (Standby Generator – North), EU43-1 (Standby Generator – South), and 951-1 (Return Sewer Pump Station Emergency Generator).

Authority for Requirement: 40 CFR Part 63, Subpart ZZZZ

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

# 40 CFR 503 Subchapter O, Use or Disposal of Sewage Sludge

The requirements of Subchapter O of 40 CFR 503, Standards for the Use and Disposal of Sewage Sludge apply to this source. Affected units at the facility are EU013-1, and EU013-1B (Sludge Incinerator).

Authority for Requirement: 40 CFR Part 503, Subchapter O

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

Facility Name: Cedar Rapids WPCF

Permit Number: 05-TV-001R3

#### **Carbon Scrubber**

**Emission Point ID Number: 001, 003** 

**Table 3. 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	Carbon Scrubber (East)
003	001-1	(Dry Well)	Air	0.54 MMcf/hr	003-1	Carbon Scrubber (West)

# **Applicable Requirements**

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

**Table 4. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
001	II C	2.15 lb/hr	Crinthatia Minan	LCPH ATI 4532 / PTO 4753R4
003	П28	9.4 tpy	Synthetic Minor	LCPH ATI 4714 / PTO 4754R4

# **Operating Limits and 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 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 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 CE003-1).

Authority for Requirement: LCPH ATI 4532 / PTO 4753R4

LCPH ATI 4714 / PTO 4754R4

# **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 5. Stack Characteristics** 

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

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 equ	tipment shall comply with the monitoring red	quirements listed	below.	
Agency Approved Operation	s & Maintenance Plan Required?	Yes □	No 🗵	
Facility Maintained Operation	on & Maintenance Plan Required?	Yes □	No 🗵	
Compliance Assurance Moni	toring (CAM) Plan Required?	Yes □	No 🗵	
Authority for Requirement:	567 IAC 24.108(3)			

Emission Point ID Number: 012, 019

**Table 6. 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	Air	250 gpm		
	300-5	Centrifuge #2 Centrate	All	3 tph (dry)		
	300-6	Centrifuge #2 Drop Hood				
	300-7	Centrifuge Mezzanine (South)	A :	2 100 -6		
	300-8	Centrifuge Mezzanine (North)	Air	2,100 cfm		
	300-9	Solids Dewatering Building Operating Floor	Air	2,000 cfm		
	300-10	Grit Room Exhaust	Air	3,400 cfm		
	300-11	Stair Screen	Air	3.6 MGD		D' 4 ' 11'
012 019	300-12	Grit Hopper	Air	Screw – 40 ft3/hr Conveyor – 200 ft3/hr Blower – 750 cfm	012-1 019-1	Biotrickling Filter Wet Chemical
	300-13	Solids Dewatering Building Manhole	Air	100 cfm		Scrubber
	300-14	Incinerator Manhole	Air	1,500 cfm		
	300-15	High Pressure Pump #1				
	300-16	High Pressure Pump #2	Air	150 gpm		
	300-17	High Pressure Pump #3	All	130 gpiii		
	300-18	High Pressure Pump #4				
	300-19	Storage Tank	Air	2,835,888 gal		
	300-20	Blend Tank #1	Air	264,231 gal		
	300-21	Blend Tank #2	Air	264,231 gal		
	300-22	Belt Filter Press #1 (East)	Air	140 gpm @ 1.5-3%		
	300-23	Belt Filter Press #2 (West)	7 111	1 10 gpin to 1.5 570		

# **Applicable Requirements**

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

**Table 7. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
012 019	H <sub>2</sub> S	9.4 tpy <sup>1</sup>	Limit to PTE	LCPH ATI 7047R1 / PTO 7208 LCPH ATI 7048 / PTO 7204
019	H <sub>2</sub> S	9 ppm <sub>v</sub> <sup>2</sup>	Limit to PTE	LCPH ATI 7048 / PTO 7204

<sup>&</sup>lt;sup>1</sup> This limit includes emissions from EP012 and EP019.

<sup>&</sup>lt;sup>2</sup> This emission limit is based on a twelve (12) month rolling average.

# **Operating Limits and 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 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 biotrickling filter (CE012-1) [and 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 [these emission points].

Authority for Requirement: LCPH ATI 7047R1 / PTO 7208 LCPH ATI 7048 / PTO 7204

B. 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.C. Wash cycles in the biotrickling filter (CE012-1) shall be performed according to the
- manufacturer's specifications and good operating practices. The owner or operator shall monitor and record the wash cycle frequency on a weekly basis.

Authority for Requirement: LCPH ATI 7047R1 / PTO 7208

- D. 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 pH in the wet chemical scrubber on a weekly basis.
- E. The twelve (12) month rolling average outlet concentration of hydrogen sulfide (H<sub>2</sub>S) shall not exceed 9 ppm<sub>v</sub>. The owner or operator shall monitor and record the outlet concentration of H<sub>2</sub>S at a minimum of once per week while the wet chemical scrubber (CE019-1) is operating. The owner or operator shall calculate the monthly average from the available weekly outlet concentrations of H<sub>2</sub>S. The twelve (12) month rolling average shall be calculated from the monthly average outlet concentration of H<sub>2</sub>S.

Authority for Requirement: LCPH ATI 7048 / PTO 7204

# **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 8. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
012	42.9	V	48	Amb.	25,000	LCPH ATI 7047R1 / PTO 7208
019	58	V	54	40- 150	25,000	LCPH ATI 7048 / PTO 7204

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**

These emission points are subj	ect to the stack testing requirements in App	pendix D of this pe	rmit.
Authority for Requirement:	567 IAC 24.108(3)		
Agency Approved Operation	s & Maintenance Plan Required?	Yes □	No 🗵
Facility Maintained Operation	on & Maintenance Plan Required?	Yes □	No 🗵
Compliance Assurance Moni	toring (CAM) Plan Required?	Yes □	No ⊠

Authority for Requirement: 567 IAC 24.108(3)

#### **Incinerator**

**Emission Point ID Number: 013** 

**Table 9. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
	013-1	Sludge Incinerator (natural gas)	Sludge	3 tph (dry)	012.1	V 4- 'C -11
013	013-1B	Sludge Incinerator (biogas)	Sludge	30.15 MMBtu/hr	013-1 013-2	Venturi Scrubber Low NO <sub>X</sub> Burners
	300-1	Decant Tank #1	Sludge	290,000 gal	053-1	Biogas Sulfur Scrubber
	300-2	Decant Tank #2	Sludge	290,000 gal		

**Table 10. Associated Continuous Monitoring Systems** 

EP	EU	ME	Pollutant	Applicable Specifications <sup>1</sup>	Authority for Requirement
012	013-1	013-1	CO	40 CFR Part 503	LCPH ATI 6532 / PTO 6411R2
013	013-1B	013-2	Diluent O <sub>2</sub>	40 CFR Part 60, Subpart O	LCPH ATT 6532 / PTO 64TTR2

<sup>&</sup>lt;sup>1</sup> Includes Operational Specifications, Ongoing System Calibration / Quality Assurance, and Reporting & Recordkeeping requirements.

# **Applicable Requirements**

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

**Table 11. NSPS Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
	PM	1.30 lb/ton dry sludge input	40 CFR §60.152(a)(1) 567 IAC 23.1(2)"k" LCCO Sec. 10-62(b)(11)	
013	Opacity	20%1	40 CFR §60.152(a)(2) 567 IAC 23.1(2)"k" LCCO Sec. 10-62(b)(11) LCCO Sec. 10-60(a)	LCPH ATI 6532 / PTO 6411R2

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

**Table 12. NESHAP Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
013	Mercury	3.2 kg / 24-hour period (7.1 lb / 24-hour period)	40 CFR §61.52(b) 40 CFR §503.43(b) 567 IAC 23.1(3)"d" LCCO Sec. 10-62(c)(4)	LCPH ATI 6532 / PTO 6411R2

**Table 13. Part 503 Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
	THC	$100~\mathrm{ppm_v}^1$	40 CFR §503.44(c) 567 IAC 23.1(2)"k" LCCO Sec. 10-62(b)(11)	
	СО	$100~\mathrm{ppm_v}^1$	40 CFR §503.40(c)(2) 567 IAC 23.1(2)"k" LCCO Sec. 10-62(b)(11)	
013	Beryllium	10 g / 24-hour period (0.022 lb / 24-hour period)	40 CFR §503.43(a)	LCPH ATI 6532 / PTO 6411R2
	Lead	Calculated <sup>2</sup>	40 CFR §503.43(c)	
	Arsenic	Calculated <sup>3</sup>		
	Cadmium	Calculated <sup>3</sup>	40 CFR §503.43(d)	
	Chromium	Calculated <sup>3</sup>	40 CFR 9303.43(d)	
	Nickel	Calculated <sup>3</sup>		

<sup>&</sup>lt;sup>1</sup> 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).

Equation (4).

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

#### Where:

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.

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 40 CFR §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 40 CFR §503.43(e).

<sup>&</sup>lt;sup>2</sup> (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) [of Subpart E to Part 503].

<sup>3</sup> (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) [of Subpart E to Part 503].

Equation (5).

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

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 40 CFR §503.43.

Table 1 of 40 CFR §503.43 Risk Specific Concentration for Arsenic, Cadmium, and Nickel

Pollutant	RSC (µg/cm <sup>3</sup> )
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 40 CFR §503.43 or shall be calculated using Equation (6) [of Subpart E to Part 503].

Table 2 of 40 CFR §503.43 Risk Specific Concentration for Chromium

Pollutant	RSC (µg/cm³)
Chromium	0.064

Equation (6).

$$RSC = \frac{0.0085}{r}$$

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 40 CFR \$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).

**Table 14. General Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
	PM <sub>10</sub>	3.04 lb/hr <sup>1</sup>	NAAQS	
012	SO <sub>2</sub>	9.0 lb/hr		I CDU ATI (522 / DTO (411D2
013		39.4 tpy <sup>2</sup>	Requested limit	LCPH ATI 6532 / PTO 6411R2
	NO <sub>X</sub>	12.4 lb/hr		

<sup>&</sup>lt;sup>1</sup> The emission limit used in facility-wide non-PSD modeling for Project Number 1500 to predict attainment of the NAAQS.

<sup>&</sup>lt;sup>2</sup> The emission limit applies to the combined emissions of EP013, EP053, EP054, and EP056 when burning biogas.

# **Operating Limits and 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:

**Table 15. NSPS Subpart Summary** 

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

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

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

Table 16. Part 61 NESHAP Subpart Summary

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
012 1	A	General Conditions	NA	10-62(d)	§63.1 – §63.16
013-1 013-1B	Е	National Emission Standard for Mercury		10-62(c)(4)	§61.50 – §61.56

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

C. 40 CFR Part 503, Subchapter O – Standards for the Use or Disposal of Sewer Sludge: The following subparts apply to the emission unit(s) in this permit:

Table 17. Part 503, Subchapter O Subpart Summary

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

Authority for Requirement: LCPH ATI 6532 / PTO 6411R2

D. Emission units 013-1 and 013-1B are subject to the following federal regulation: *Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or before October 14, 2010.* 

Authority for Requirement: 40 CFR Part 62, Subpart LLL

#### **Operating Requirements and Associated 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 H<sub>2</sub>S at a level no less than 99% during operation. The H<sub>2</sub>S content in the biogas shall be determined upstream and downstream of the sulfur scrubber (CE053-1) 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).
  - 1. H<sub>2</sub>S content of biogas prior to and after CE053-1 and the calculated removal efficiency.
  - 2. 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.
  - 3. The make-up liquor flow rate in CE053-1 shall be maintained at a minimum of 400 gallons per minute and be monitored daily.
  - 4. 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 the 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 CE053-1).
- 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) daily 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).
- G. The owner or operator shall comply with the requirements of NSPS Subpart O by meeting the standards for particulate matter, monitoring of operations, test methods, and procedures, and reporting of 40 CFR §60.152 §60.155.
  - 1. Submit a [semi-annual] report pursuant to 40 CFR §60.155 postmarked by March 31<sup>st</sup> and September 30<sup>th</sup> 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).
- 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.
- J. The owner or operator shall comply with the requirements of 40 CFR [Part] 503, Subpart E by complying with the requirements of 40 CFR §503.40 §503.48.

- 1. Submit an annual report pursuant to 40 CFR §503.48 by February 19<sup>th</sup> of 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:
  - 1. Afterburner chamber temperature
  - 2. Scrubber (CE013-1) pressure drop
  - 3. Scrubber (CE013-1) water flow rate
  - 4. Scrubber (CE013-1) water effluent pH

Authority for Requirement: LCPH ATI 6532 / PTO 6411R2

# **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 18. Stack Characteristics** 

SEP	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 6411R2

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**

This emission point is subject to the stack testing requirements in Appendix D of this permit.

Authority for Requirement: 567 IAC 24.108(3)

#### **Continuous Emission Monitoring**

- 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 40 CFR §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
  - ii. A calibration and maintenance log for the instrument used to measure the carbon monoxide concentration.

Authority for Requirement: LCPH ATI 6532 / PTO 6411R2

# **Opacity Monitoring**

This emission point is subject to the opacity monitoring requirements in Appendix D of this permit.

Authority for Requirement: 567 IAC 24.108(14)

Agency Approved Operations & Maintenance Plan Required?	Yes □	No ⊠¹
Facility Maintained Operation & Maintenance Plan Required?	Yes □	No ⊠
Compliance Assurance Monitoring (CAM) Plan Required?	Yes □	No ⊠²

Authority for Requirement: 567 IAC 24.108(3)

<sup>&</sup>lt;sup>1</sup> The requirement to maintain an Agency-Approved Operations and Maintenance Plan does not apply to the Low-NO<sub>X</sub> Burners, which are considered "intrinsic equipment."

 $<sup>^2</sup>$  Compliance Assurance Monitoring is required for  $PM_{10}$  emissions and an agency operations and maintenance plan is required for PM emissions; however, PM and  $PM_{10}$  are controlled by the same equipment and the applicable federal, state, and local regulations in combination with the monitoring and recordkeeping requirements of the construction permits are considered CAM-equivalent.

**Emission Point ID Number: 014** 

**Table 19. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
	013-1	Sludge Incinerator (natural gas)	Sludge	3 tph (dry)		None
014	013-1B	Sludge Incinerator (biogas)	Sludge	30.15 MMBtu/hr		None
014	300-1	Decant Tank #1	Sludge	290,000 gal		None
	300-2	Decant Tank #2	Sludge	290,000 gal		None

# **Applicable Requirements**

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

**Table 20. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
014	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 4459 / PTO 4516R3

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

# **Operating Limits and 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):

This process is of the source category for Subpart O (*Standards of Performance for Sewage Treatment Plants*; 40 CFR §60.150 – §60.156). However, there are no requirements for this process because this is the emergency bypass to the sludge incinerator.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

Authority for Requirement: LCPH ATI 4459 / PTO 4516R3

#### **Operating Requirements and Associated 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. 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 4516R3

### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 21. Stack Characteristics** 

SEP	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	Passive	LCPH ATI 4459 / PTO 4516R3

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 requ	iirements listed	below.	
Agency Approved Operations & Maintenance Plan Required?	Yes □	No 🛛	
Facility Maintained Operation & Maintenance Plan Required?	Yes □	No 🛛	
Compliance Assurance Monitoring (CAM) Plan Required?	Yes □	No 🗵	

#### **Boilers**

Emission Point ID Number: 015, 016, 017

**Table 22. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
015	015-1	Auxiliary Boiler #3	Natural Gas / Biogas	10.205 MMBtu/hr		None
016	016-1	Auxiliary Boiler #2	Natural Gas / Biogas	18.844 MMBtu/hr		None
017	017-1	Auxiliary Boiler #1	Natural Gas / Biogas	18.844 MMBtu/hr		None

# **Applicable Requirements**

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

**Table 23. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
		0.6 lb/MMBtu	567 IAC 23.3(2)"b"(2)	567 IAC 23.3(2)"b"(2)
	PM	0.1 gr/dscf	Permit requirement	
015	FIVI	0.417 lb/MMBtu	LCCO Sec. 10-61(a)(3)	I CDII ATI (072 / DTO (157D2
016		0.41 / 10/1VIIVIDIU	LCCO Sec. 10-61(b)(2)	LCPH ATI 6073 / PTO 6157R2 LCPH ATI 5050 / PTO 5149R1
017	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 5050 / PTO 5149R1
	00	500 ppm <sub>v</sub>	LCCO Sec. 10-65(a)(2)	LCHTAIT 3031/11 TO 3146K1
	$SO_2$	39.4 tpy	Synthetic minor	
016	DM	0.14 lb/hr <sup>2</sup>	NAAQS	LCPH ATI 5050 / PTO 5149R1
017	PM <sub>10</sub>	0.14 10/111	NAAQS	LCPH ATI 5051 / PTO 5148R1

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

# **Operating Limits and 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:

<sup>&</sup>lt;sup>2</sup> Emission rate used to demonstrate no exceedance of the National Ambient Air Quality Standards (NAAQS).

Table 24. NSPS Subpart Summary

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
015	A	General Conditions	NA	10-62(b)	§60.1 – §60.19
015 016 017	Dc	Small Industrial-Commercial- Institutional Steam Generating Units		10-62(b)(64)	§60.40c – §60.48c

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

Authority for Requirement: LCPH ATI 6073 / PTO 6157R2

LCPH ATI 5050 / PTO 5149R1 LCPH ATI 5051 / PTO 5148R1

# **Operating Limits**

- A. The sulfur scrubber shall maintain effective removal efficiency for H<sub>2</sub>S at a level no less than 99% during operation. The content of H<sub>2</sub>S 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 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.
- C. 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.
- D. The owner or operator shall meet the applicable requirements of [40 CFR §60.40c §60.48c (NSPS Subpart Dc) to comply with LCCO Sec. 10-62(b)(64).]
- E. Fuel in this boiler shall be limited to only natural gas or biogas or a combination of the two.

Authority for Requirement: LCPH ATI 6073 / PTO 6157R2

LCPH ATI 5050 / PTO 5149R1 LCPH ATI 5051 / PTO 5148R1

# **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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Recordkeeping and reporting for NSPS Subpart Dc shall be done in accordance with 40 CFR §60.48c.
- B. Maintain records of all H<sub>2</sub>S analyses obtained from biogas sampling identified under [the Operating Limits section above.]
- C. Calculate and record H<sub>2</sub>S analyses removal efficiency of the sulfur scrubber for each sampling event required under [the Operating Limits section above.]

Authority for Requirement: LCPH ATI 6073 / PTO 6157R2

LCPH ATI 5050 / PTO 5149R1 LCPH ATI 5051 / PTO 5148R1

D. Calculate and record monthly SO<sub>2</sub> emissions from this emission unit on a 12-month rolling sum while burning biogas.

Authority for Requirement: LCPH ATI 6073 / PTO 6157R2

E. Calculate and record monthly SO<sub>2</sub> emissions for Auxiliary Boilers 1 & 2 (EP016 and EP017) on a 12-month rolling sum while burning biogas.

Authority for Requirement: LCPH ATI 5050 / PTO 5149R1

LCPH ATI 5051 / PTO 5148R1

#### **Reporting Requirements**

A. Submit notification of the start of construction, anticipated startup, and actual startup to include all information listed under 40 CFR §60.48c.

Authority for Requirement: LCPH ATI 6073 / PTO 6157R2

LCPH ATI 5050 / PTO 5149R1 LCPH ATI 5051 / PTO 5148R1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 25. Stack Characteristics** 

SEP	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 6157R2
016	61.3	V	42	600	4,500	LCPH ATI 5050 / PTO 5149R1
017	61.3	V	42	600	4,500	LCPH ATI 5051 / PTO 5148R1

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.

#### **Opacity Monitoring**

These emission points are subject to the opacity monitoring requirements in Appendix C of this permit.

Authority for Requirement: 567 IAC 24.108(14)

<b>Agency Approved Operation</b>	ns & Maintenance Plan Required?	Yes □	No 🛛
<b>Facility Maintained Operati</b>	on & Maintenance Plan Required?	Yes □	No 🛛
<b>Compliance Assurance Mon</b>	itoring (CAM) Plan Required?	Yes □	No 🛛
Authority for Requirement:	567 IAC 24.108(3)		

#### **Alkaline Stabilization**

Emission Point ID Number: 021, 022, 034

**Table 26. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
021	021-1	Alkaline Stabilization Lime Silo #1	Lime	25.9 tph	021-1	Baghouse
022	022-1	Alkaline Stabilization Lime Silo #2	Lime	25.9 tph	022-1	Baghouse
034	034-1	CAS / NAS Lime Silo (North)	Lime	25.0 tph	034-1	Baghouse

# **Applicable Requirements**

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

**Table 27. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
021 022	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCCO Sec. 10-62(a)	LCPH ATI 6035 / PTO 6103 LCPH ATI 6036 / PTO 6104
034	Opacity	20%	LCCO Sec. 10-60(a) <sup>1</sup>	

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

#### **Operating Limits and Requirements**

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

# **Control Equipment**

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.

All appropriate probes, monitors and gauges needed to measure the parameters outlined in [the Operating Condition Monitoring and Recordkeeping section below] shall be installed, maintained and operating during the operation of the emission unit and control device 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall 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.

**Table 28. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
021	46	V	11 x 10	Amb.	880	LCPH ATI 6035 / PTO 6103
022	46	V	11 x 10	Amb	880	LCPH ATI 6036 / PTO 6104
034	57	D	6	Amb.	1,176	LCPH ATI 1313 / PTO 1040

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.

#### **Opacity Monitoring**

These emission points are subject to the opacity monitoring requirements in Appendix C of this permit.

Authority for Requirement: 567 IAC 24.108(14)

LCPH ATI 6035 / PTO 6103 LCPH ATI 6036 / PTO 6104

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

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

 Compliance Assurance Monitoring (CAM) Plan Required?
 Yes □
 No ☒¹

 Authority for Requirement:
 567 IAC 24.108(3)

<sup>&</sup>lt;sup>1</sup> Iowa DNR *Periodic Monitoring Guidance for Non-Hazardous Air Pollutants with Applicable Requirements* indicates compliance assurance monitoring is required for PM<sub>10</sub>; however, emissions only occur during fill events. The 'no visible emissions' requirement and facility operations and maintenance plan requirement are sufficient for intermittent sources. The CAM requirement has been waived for EPs 021, 022, and 034.

# **Standby Generators**

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

**Table 29. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
036	036-1	MCC1 Standby Generator (Main Lift)	Diesel	108.3 gph	036-1	Oxidation Catalyst
037	037-1	Standby Generator (Solids Dewatering)	Diesel	108.3 gph	037-1	Oxidation Catalyst
040	040-1	Standby Generator (#3N Final Lift)	Diesel	115.7 gph	040-1	Oxidation Catalyst
041	041-1	Standby Generator (#7S Final Lift)	Diesel	115.7 gph	041-1	Oxidation Catalyst

# **Applicable Requirements**

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

**Table 30. General Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a"	
036	1 1/1	0.1 gi/dsci	LCCO Sec. 10-62(a)	LCPH ATI 1946 / PTO 1912R2
037	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 6037 / PTO 6113R2
040		2.5 lb/MMBtu	567 IAC 23.3(3)"b"(2)	LCPH ATI 2782 / PTO 2772R2
041	SO <sub>2</sub> 1.5 lb/MMBtu		LCCO Sec. 10-65(a)(2)	LCPH ATI 2781 / PTO 2773R2
		15 ppm sulfur	40 CFR §1090.305(b)	

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

**Table 31. NESHAP Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
036 037 040 041	СО	23 ppmvd @ 15% O2 or ≥ 70% reduction	40 CFR §63.6603	40 CFR §63.6603

# **Operating Limits and Requirements**

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

#### **Federal Standards**

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

**Table 32. NESHAP Subpart Summary** 

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
036	A	General Conditions	NA	10-62(d)	§63.1 – §63.16
037 040 041	ZZZZ	Stationary Reciprocating Internal Combustion Engines	Existing CI Area Source of HAP	10-62(d)(104)	§63.6580 – §63.6675

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

Authority for Requirement: LCPH ATI 1946 / PTO 1912R2

LCPH ATI 6037 / PTO 6113R2 LCPH ATI 2782 / PTO 2772R2 LCPH ATI 2781 / PTO 2773R2

#### **NESHAP:**

The non-emergency engine is subject to 40 CFR Part 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) this non-emergency engine, located at an area source, is an existing stationary RICE as it was constructed prior to June 12, 2006.

# <u>Compliance Date</u><sup>1</sup>:

According to 40 CFR §63.6595(a)(1), you must comply with the applicable provisions of Subpart ZZZZ no later than May 3, 2013.

#### Emission Standards<sup>2</sup>:

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 ppm<sub>vd</sub> or less at 15 percent O<sub>2</sub>; or
- 2. Reduce CO emissions by 70 percent or more.

#### Operating Limits<sup>2</sup>:

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

- 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 1,350 °F.

#### **Fuel Requirements:**

You must use diesel fuel that meets the requirements in [40 CFR §1090.305(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% by volume. 40 CFR §63.6604(a).

#### <u>Testing and Compliance Requirements:</u>

- 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.
- 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 DNR within 60 days after the completion of the testing.
- 5. If you elect to install a CEMS as specified in Table 5 of Subpart ZZZZ, you must install, operate, and maintain the CEMS according to the requirements in 40 CFR §63.6625(a).
- 6. 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).
- 7. 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.<sup>2</sup>
- 8. 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.
- 9. You must demonstrate continuous compliance with applicable emission limitations, operating limitations, and other requirements in pursuant to 40 CFR §63.6605, §63.6635, and §63.6640(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 Part 63, Subpart ZZZZ

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

<sup>&</sup>lt;sup>1</sup> In accordance with 40 CFR §63.6603(e), if your engine is certified to the Tier 3 (Tier 2 for engines > 560 kW) emission standards in Table 1 of 40 CFR §89.112, you may comply with the requirements under Part 63 by meeting the requirements for Tier 3 engines (Tier 2 for engines > 560 kW) in 40 CFR Part 60, Subpart IIII.

<sup>&</sup>lt;sup>2</sup> See 40 CFR §63.6603(d) for alternative standards for certain certified Tier 1 and Tier 2 engines that are required to be replaced no later than June 1, 2018. However, you must submit a notification by March 3, 2013 in accordance with 40 CFR §63.6645(i).

## **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 §1090.305(b)].

Authority for Requirement: LCPH ATI 1946 / PTO 1912R2

LCPH ATI 6037 / PTO 6113R2 LCPH ATI 2782 / PTO 2772R2 LCPH ATI 2781 / PTO 2773R2

## **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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- 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 mee the specifications of [40 CFR §1090.305(b)] on an annual basis.

Authority for Requirement: LCPH ATI 1946 / PTO 1912R2

LCPH ATI 6037 / PTO 6113R2 LCPH ATI 2782 / PTO 2772R2 LCPH ATI 2781 / PTO 2773R2

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

Table 33. Stack Characteristics

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
036	16	V	14	904	13,935	LCPH ATI 1946 / PTO 1912R2
037	16.75	V	14	904	19,935	LCPH ATI 6037 / PTO 6113R2
040	20.25	V	16	961	14,310	LCPH ATI 2782 / PTO 2772R2
041	20.25	V	16	961	14,310	LCPH ATI 2781 / PTO 2773R2

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**

JAK

These emission points are subject to the stack testing requirements in Appendix D of this permit. Authority for Requirement: 567 IAC 24.108(3) Yes □ No 🛛 Agency Approved Operations & Maintenance Plan Required? Facility Maintained Operation & Maintenance Plan Required? Yes  $\square$ No 🛛 Yes  $\square$ No 🛛

Authority for Requirement: 567 IAC 24.108(3)

Compliance Assurance Monitoring (CAM) Plan Required?

**Emission Point ID Number: 042, 043** 

**Table 34. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
042	042-1	Standby Generator – North	Natural Gas	14,580 cf/hr	042-1	Oxidation Catalyst
043	043-1	Standby Generator – South	Natural Gas	14,580 cf/hr	043-1	Oxidation Catalyst

## **Applicable Requirements**

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

**Table 35. General Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
042	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCCO Sec. 10-62(a)	567 IAC 23.3(2)"a" LCCO Sec. 10-62(a)
043	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 6590 / PTO 6454R1
	SO <sub>2</sub>	500 ppm <sub>v</sub>	LCCO Sec. 10-65(a)(2)	LCPH ATI 6591 / PTO 6455R1

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

**Table 36. NSPS Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement	
0.42	NO <sub>X</sub>	1.0 g/hp-hr (82 ppm <sub>vd</sub> @ 15% O <sub>2</sub> )		I CDI LATI (500 / DTO (454D1	
042 043	CO	2.0 g/hp-hr (270 ppm <sub>vd</sub> @ 15% O <sub>2</sub> )	40 CFR §60.4233(e)	LCPH ATI 6590 / PTO 6454R1 LCPH ATI 6591 / PTO 6455R1	
043	VOC1	0.7 g/hp-hr (60 ppm <sub>vd</sub> @ 15% O <sub>2</sub> )		LCPH A11 6391 / P1O 6433R1	

<sup>&</sup>lt;sup>1</sup> For the purposes of NSPS Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

**Table 37. Other Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
042 043	PM / PM <sub>10</sub>	0.15 lb/hr <sup>1</sup>	NAAQS	LCPH ATI 6590 / PTO 6454R1 LCPH ATI 6591 / PTO 6455R1

<sup>&</sup>lt;sup>1</sup> Emission rate used to demonstrate no exceedance of the National Ambient Air Quality Standards (NAAQS).

#### **Operating Limits and 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:

**Table 38. NSPS Subpart Summary** 

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
042.1	A	General Conditions	NA	10-62(b)	§60.1 – §60.19
042-1 043-1	JJJJ	Stationary Spark Ignition Internal Combustion Engines		10-62(b)(78)	§60.4230 – §60.4248

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

#### B. New Source Performance Standards (NESHAP):

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

**Table 39. NESHAP Subpart Summary** 

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
	A	General Conditions	NA	10-62(d)	§63.1 – §63.16
042-1 043-1	ZZZZ	Stationary Reciprocating Internal Combustion Engines	New SI Area Source of HAP	10-62(d)(104)	§63.6580 – §63.6675

These engines are new reciprocating internal combustion engines located at an area source of HAP. In accordance with 40 CFR §63.6590(c)(1), these engines must comply with the requirements of NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart JJJJ. No further requirements apply to these engines under NESHAP Subpart ZZZZ.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

Authority for Requirement: LCPH ATI 6590 / PTO 6454R1

LCPH ATI 6591 / PTO 6455R1

## **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 [the Operating Limits section below] 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 6454R1

LCPH ATI 6591 / PTO 6455R1

## **Operating Limits**

A. The owner or operator shall meet the applicable General Provisions requirements of 40 CFR Part 60 (Subpart A) as indicated in 40 CFR §60.4246 to comply with [LCCO 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 [LCCO 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 [LCCO 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 6454R1

LCPH ATI 6591 / PTO 6455R1

#### **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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. The owner or operator shall comply with the 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 6454R1

LCPH ATI 6591 / PTO 6455R1

## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 40. Stack Characteristics** 

SEP	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 6454R1
043	18	V	17	974	11,846	LCPH ATI 6591 / PTO 6455R1

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 eq	uipment shall comply with the monitoring red	quirements listed	below.	
Agency Approved Operation	ns & Maintenance Plan Required?	Yes □	No 🛛	
Facility Maintained Operati	on & Maintenance Plan Required?	Yes □	No 🛛	
Compliance Assurance Mon	itoring (CAM) Plan Required?	Yes □	No 🛛	
Authority for Requirement:	567 IAC 24.108(3)			

**JAK** 

#### **Magnesium Bisulfite**

**Emission Point ID Number: 045** 

**Table 41. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
0.45	045-1	MBS North Tank	Magnesium Bisulfite	5,875 gal		None
045	045-2	MBS South Tank	Magnesium Bisulfite	5,875 gal		None

## **Applicable Requirements**

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

**Table 42. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
045	SO <sub>2</sub>	3.67 lb/hr <sup>1</sup>	NAAQS	LCPH ATI 6999 / PTO 6766

<sup>&</sup>lt;sup>1</sup> Emission rate used in facility-wide non-PSD dispersion modeling for Project 2353 to predict attainment of the 3-hour, 24-hour, and annual SO<sub>2</sub> National Ambient Air Quality Standards (NAAQS). This is an 'intermittent' source, and was therefore not included in the 1-hour SO<sub>2</sub> NAAQS demonstration.

### **Operating Limits and 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 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 Magnesium Bisulfite (MBS) Tanks (EU045-1 and EU045-2) are limited to a combined throughput of 564,000 gallons per 12-month rolling period. The owner or operator shall record and monitor the amount of MBS purchased on a monthly basis, calculate, and record the 12-month rolling total.

Authority for Requirement: LCPH ATI 6999 / PTO 6766

## **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 43. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
045	9	D	4	Amb.	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 eq	uipment shall comply with the monitoring red	quirements listed	below.	
Agency Approved Operation	ns & Maintenance Plan Required?	Yes □	No 🗵	
Facility Maintained Operati	on & Maintenance Plan Required?	Yes □	No 🗵	
Compliance Assurance Mon	itoring (CAM) Plan Required?	Yes □	No 🗵	
Authority for Requirement:	567 IAC 24.108(3)			

**JAK** 

#### **Chlorine Building**

**Emission Point ID Number: 046** 

**Table 44. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
046	046-1	Chlorine Building	Chlorine	Up to 1 one-ton Cl <sub>2</sub> cylinder failure	046-1	Dry Scrubber

### **Applicable Requirements**

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

**Table 45. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
046	Chlorine	See endnote <sup>1</sup>	Requested limit	LCPH ATI 7081 / PTO 6926

<sup>&</sup>lt;sup>1</sup> This emission point is not designed for continuous operation. The emergency chlorine dry scrubber (CE046) is operated only if a leak from the chlorine gas cylinders stored in the chlorine building (EU046-1) is detected by continuous gas monitors and is designed to treat 100% of the on-site chlorine storage capacity. No emission limits are associated with this emission point.

#### **Operating Limits and 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 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 LCCO 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**

The emission point shall conform to the specifications listed below.

**Table 46. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
046	13	V	16 x 24	50-100	4,000	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 eq	uipment shall comply with the monitoring req	quirements listed	below.	
Agency Approved Operation	ns & Maintenance Plan Required?	Yes □	No 🛛	
Facility Maintained Operati	on & Maintenance Plan Required?	Yes □	No 🛛	
Compliance Assurance Mon	itoring (CAM) Plan Required?	Yes □	No 🛛	
Authority for Requirement:	567 IAC 24.108(3)			

## **Odor Control**

Emission Point ID Number: 050, 051, 052

**Table 47. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
	203-1A	Roughing Filter #1	Air	80,875 lb-BOD/day		
	203-1B	Roughing Filter #4	Air	80,875 lb-BOD/day		
	203-2A	Roughing Filter #2	Air	80,875 lb-BOD/day		
	203-2B	Roughing Filter #3	Air	80,875 lb-BOD/day		
	203-5	PUF JXN Box	Air	600 acfm		
	203-6	Scum Box and AE JXN Box	Air	600 scfm		
	203-7	Primary Clarifier A-1	Air	24,000 gal/day-ft		
	203-8	Primary Clarifier A-2	Air	24,000 gal/day-ft		
	203-9	Primary Clarifier A-3	Air	24,000 gal/day-ft		
	203-10	"A" DAF Thickener Overflow	Air	44,870 lb/day		
	203-11	"B" DAF Thickener Overflow	Air	68,904 lb/day		
	203-12	"C" DAF Thickener Overflow	Air	44,870 lb/day		
050	203-13	Gravity Belt Thickener #1	Air	3,600 lb/hr	050 1	Biotrickling
030	203-14	Gravity Belt Thickener #2	y Belt Thickener #2 Air 3,600 lb		050-1	Filter
	203-15	Gravity Belt Thickener #3	Air	2,800 lb/hr		
051	203-16	Gravity Belt Thickener Overflow Wet Well	Air	100 scfm	051-1	Packed Bed Scrubber
052	203-17	Anaerobic Pretreatment Preacidification Tank	Air	683,792 gal	052-1	Packed Bed
-	203-18	Anaerobic Pretreatment Reactor #1	Air	159,870 lb-COD/day		Scrubber
	203-19	Anaerobic Pretreatment Reactor #2	Air	159,870 lb-COD/day		
	203-20	Anaerobic Pretreatment Reactor #3	Air	159,870 lb-COD/day		
	203-21	Anaerobic Pretreatment Storage Tank	Air	350,000 gal		
	203-22	Anaerobic Pretreatment Standpipe	Air	2,300 gal		
	203-23	Anaerobic Pretreatment Vacuum Compressor	Air	168 cfm @ 22" Hg		
	203-24	Anaerobic Pretreatment Sulfur Setting Tank	Air	2,730 gal		
	203-25	Roughing Filter Effluent Junction Box	Air	200 scfm		

## **Applicable Requirements**

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

**Table 48. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
050				LCPH ATI 7037R1 / PTO 7205
051	$H_2S$	9.4 tpy <sup>1</sup>	Limit PTE	LCPH ATI 7038 / PTO 7206R1
052				LCPH ATI 7039 / PTO 7207R1

<sup>&</sup>lt;sup>1</sup> This limit includes emissions form EP050, EP051, and EP052.

#### **Operating Limits and 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 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 [biotrickling filter (CE050-1) and packed bed scrubbers (CE051-1 and 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 [these emission points.]
- B. Wash cycles in the [biotrickling filter (CE050-1) and packed bed scrubbers (CE051-1 and CE052-1)] shall be performed according to the manufacturer's specifications and good operating practices. The owner or operator shall monitor and record the wash cycle frequency on a weekly basis.

Authority for Requirement: LCPH ATI 7037R1 / PTO 7205

LCPH ATI 7038 / PTO 7206R1 LCPH ATI 7039 / PTO 7207R1

C. 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.

Authority for Requirement: LCPH ATI 7037R1 / PTO 7205

- D. The normal operating pH range for the [packed bed scrubbers (CE051-1 and CE052-1)] shall be maintained below 8.0 S.U. The owner or operator shall monitor and record the pH in the packed bed scrubbers continuously.
- E. Nozzle 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: the date and time of the monthly nozzle and associated spray pattern inspections; and the date and description of maintenance, repair, and/or spray pattern adjustments.

Authority for Requirement: LCPH ATI 7038 / PTO 7206R1

LCPH ATI 7039 / PTO 7207R1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 49. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
050	42.9	V	48	Amb.	25,250	LCPH ATI 7037R1 / PTO 7205
051	32	V	60	70-90	30,000 to 60,000 <sup>1</sup>	LCPH ATI 7038 / PTO 7206R1
052	32	V	60	70-90	30,000 to 60,000 <sup>1</sup>	LCPH ATI 7039 / PTO 7207R1

<sup>&</sup>lt;sup>1</sup> The flowrate varies to maintain a constant pressure drop across the associated control equipment.

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**

These emission points are subject to the stack testing requirements in Appendix D of this permit.							
Authority for Requirement:	567 IAC 24.108(3)						
<b>Agency Approved Operations</b>	Agency Approved Operations & Maintenance Plan Required? Yes □ No ☒						
Facility Maintained Operation	Facility Maintained Operation & Maintenance Plan Required? Yes □ No ⊠						
Compliance Assurance Monito	oring (CAM) Plan Required?	Yes □	No 🗵				

Authority for Requirement: 567 IAC 24.108(3)

#### Flares

Emission Point ID Number: 053, 054

**Table 50. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
053 054	053-1	Excess Biogas Flare	Biogas	1,184 cfm	053-1	Wet Scrubber

## **Applicable Requirements**

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

**Table 51. Emission Limits** 

EP	Pollutant	Pollutant Emission Limit(s) Reference/Basis		Authority for Requirement	
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCCO Sec. 10-62(a)		
		0.384 lb/hr	NAAQS		
053	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 5878 / PTO 6105	
054		$500 \text{ ppm}_{\text{v}}$	LCCO Sec. 10-65(a)(2)	LCPH ATI 5879 / PTO 6106	
	$SO_2$	4.690 lb/hr	NAAQS		
		$39.4 \text{ tpy}^2$	Synthetic minor		
	$NO_X$	5.058 lb/hr	NAAQS		

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

#### **Operating Limits and Requirements**

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

#### **Control Equipment**

A sulfur scrubber has been installed upstream of the flare to remove 99% of the hydrogen sulfide (H<sub>2</sub>S) content from the biogas and hence reduce SO<sub>2</sub> 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 [the Operating Condition Monitoring and Recordkeeping section below] 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

<sup>&</sup>lt;sup>2</sup> Aggregated SO<sub>2</sub> 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.

#### **Operating Limits**

- A. The sulfur scrubber shall maintain effective removal efficiency for H<sub>2</sub>S at a level no less than 99% during operation. The content of H<sub>2</sub>S 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 and analyzed 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 H<sub>2</sub>S content of the biogas shall be determined on a daily basis and SO<sub>2</sub> emissions calculated. Due to employee safety considerations during biogas sample collection, H<sub>2</sub>S content of unscrubbed biogas can be assumed to equal the monthly average unscrubbed H<sub>2</sub>S content. SO<sub>2</sub> emissions would be calculated daily based on the monthly average unscrubbed H<sub>2</sub>S content.
- D. Inlet scrubber H<sub>2</sub>S 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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Daily biogas flow rate to flare.
- B. Total monthly biogas production.
- C. 12-month rolling total biogas production.
- D. H<sub>2</sub>S content of inlet gas based on a twelve month rolling average.
- E. H<sub>2</sub>S analyses obtained from biogas sampling identified under [the Operating Limits section above].
- F. H<sub>2</sub>S removal efficiency of the sulfur scrubber for each sampling event required under [the Operating Limits section above].
- 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.
- I. Aggregated 12-month rolling total SO<sub>2</sub> emissions for EP013, EP053, EP054, and EP056 from the burning of biogas fuel.
- J. Records of all maintenance and repair completed on the control equipment.

Authority for Requirement: LCPH ATI 5878 / PTO 6105

LCPH ATI 5879 / PTO 6106

#### **Reporting Requirements**

The following information shall be submitted to this department as stated below:

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 calendar year) summarizing the SO<sub>2</sub> emissions generated from the combustion of biogas through EP013, EP053, EP054, and EP056.

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.

**Table 52. Stack Characteristics** 

EP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
053	25	V		>1,000	1,345	LCPH ATI 5878 / PTO 6105
054	25	V		>1,000	1,345	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			
The owner/operator of this equip	pment shall comply with the monitoring requi	rements listed	below.
<b>Agency Approved Operations</b>	Yes □	No 🗵	
Facility Maintained Operation	a & Maintenance Plan Required?	Yes □	No ⊠¹
Compliance Assurance Monito	oring (CAM) Plan Required?	Yes □	No 🛛
Authority for Requirement:	567 IAC 24.108(3)		

<sup>&</sup>lt;sup>1</sup> A Facility Operation & Maintenance Plan is required for SO<sub>2</sub> emissions; however, the facility is in compliance with the applicable federal, state, and local regulations and the monitoring and recordkeeping requirements of the construction permits are considered CAM-equivalent. The Facility O&M Plan requirement has been waived.

**Emission Point ID Number: 056** 

**Table 53. Associated Equipment** 

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
056	056-1	Emergency Biogas Flare	Biogas	1,184 cfm	056-1	Flare

## **Applicable Requirements**

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

**Table 54. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement
	PM	0.1 gr/dscf	567 IAC 23.3(2)"a" LCCO Sec. 10-62(a)	
056	Opacity	20%1	LCCO Sec. 10-60(a)	LCPH ATI 5880 / PTO 6107R1
	SO <sub>2</sub>	246.851 lb/hr 39.4 tpy <sup>2</sup>	Synthetic minor	

<sup>&</sup>lt;sup>1</sup> The observation of visible emissions of air contaminants as defined in LCCO Sec. 10-55 will require the owner/operator to promptly investigate the emission unit and make corrections to operations or equipment associated with the visible emissions. If visible emissions continue after the corrections, Linn County may require additional proof to demonstrate compliance (e.g., stack testing).

#### **Operating Limits and Requirements**

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

#### **Control Equipment**

A flare shall be installed to control hydrogen sulfide 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 [the Operating Condition Monitoring and Recordkeeping section below] shall be installed, maintained and operating during the operation of the emission unit and control device at all times.

Authority for Requirement: LCPH ATI 5880 / PTO 6107R1

#### **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 6107R1

<sup>&</sup>lt;sup>2</sup> Aggregated SO2 emissions from EP013, EP053, EP054, and EP056 shall not exceed 39.4 tons per 12-month rolling total limit from the burning of biogas fuel.

#### **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 Department. Records shall be legible and maintained in an orderly manner. The operating requirements and associated recordkeeping for this permit shall be:

- A. Daily biogas flow rate to the emergency flare when operated.
- B. Record the number of hours of emergency flare operation each month and calculate the 12-month rolling total.
- C. Monthly SO<sub>2</sub> emissions for the emergency flare.
- D. Aggregated 12-month rolling total SO<sub>2</sub> emissions for EP013, EP053, EP054, and EP056 from the burning of biogas.
- E. Records of all maintenance and repair completed on the emergency flare.

Authority for Requirement: LCPH ATI 5880 / PTO 6107R1

## **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<sub>2</sub> emissions generated from the combustion of biogas through EP013, EP053, EP054, and EP056.

Authority for Requirement: LCPH ATI 5880 / PTO 6107R1

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 55. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (scfm)	Authority for Requirement
056	27	V	12	>1,000	4,167	LCPH ATI 5880 / PTO 6107R1

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 eq	uipment shall comply with the monitoring red	quirements listed	below.	
Agency Approved Operation	ns & Maintenance Plan Required?	Yes □	No 🛛	
Facility Maintained Operati	on & Maintenance Plan Required?	Yes □	No 🛛	
Compliance Assurance Mon	itoring (CAM) Plan Required?	Yes □	No 🛛	
Authority for Requirement:	567 IAC 24.108(3)			

## **Emergency Generator**

**Emission Point ID Number: 951** 

**Table 56.** Associated Equipment

EP	EU	EU Description	Raw Material	Rated Capacity	CE ID	CE Description
951	951-1	Return Sewer Pump Station Emergency Generator	Diesel	385 hp		None

## **Applicable Requirements**

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

**Table 57. Emission Limits** 

EP	Pollutant	Emission Limit(s)	Reference/Basis	Authority for Requirement	
	PM	M 0.20 g/kW-hr			
	$NO_X + NMHC^1$	4.0 g/kW-hr			
	CO	3.5 g/kW-hr	567 IAC 23.1(2)"yyy"	CI168	
951		20%2	LCCO Sec. 10-62(b)(77)		
931	Omanita	15%3			
	Opacity	50%4			
		20%	LCCO Sec. 10-60(a)	LCCO Sec. 10-60(a)	
	SO2 1.5 lb/MMBtu		LCCO Sec. 10-65(a)(1)(b)	LCCO Sec. 10-65(a)(1)(b)	

<sup>&</sup>lt;sup>1</sup> Non-Methane Hydrocarbons

## **Operating Limits and 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:

Table 58. NSPS Subpart Summary

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
	A	General Conditions	NA	10-62(b)	§60.1 – §60.19
951-1			New Emergency Engine	10-62(b)()	§60.4200 – §60.4219

<sup>&</sup>lt;sup>2</sup> During the acceleration mode.

<sup>&</sup>lt;sup>3</sup> During the lugging mode.

<sup>&</sup>lt;sup>4</sup> During the peaks in either the acceleration or lugging modes.

NOTE: The absence of the inclusion of any NSPS requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NSPS conditions.

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

**Table 59. NESHAP Subpart Summary** 

EU ID	Subpart	Title	Туре	Local Reference (LCCO Sec.)	Federal Reference (40 CFR)
	A	General Conditions	NA	10-62(d)	§63.1 – §63.16
951-1	ZZZZ	Stationary Reciprocating Internal Combustion Engines	New Emergency Engine at an Area Source	10-62(d)(104)	§63.6580 – §63.6675

This engine is a new reciprocating internal combustion engine located at an area source of HAP. In accordance with 40 CFR §63.6590(c)(1), these engines must comply with the requirements of NESHAP Subpart ZZZZ by meeting the requirements of NSPS Subpart IIII. No further requirements apply to these engines under NESHAP Subpart ZZZZ.

NOTE: The absence of the inclusion of any NESHAP requirements as part of this permit does not relieve the owner or operator from any obligation to comply with all applicable NESHAP conditions.

Authority for Requirement: CI168

## **Emission Standards for Owners and Operators**

A. 2007 and later model year engines must be certified by the manufacturer to comply with the emission standards of Subpart IIII. These standards are summarized in [Appendix I to 40 CFR §1039].

Authority for Requirement: CI168

#### **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: CI168

#### **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. Operations 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: CI168

## **Summary of Compliance Requirements for Owners and Operators**

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. Owner and operators must meet the applicable emission standards listed in the appendix to [CI168]. The engine must be installed and configured according to the manufacturer's specifications.
- B. Owners 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.
- C. Owners and operators of pre-2007 model year CI engines or owners and operators of a fire pump engines manufactured prior to the model year matching the maximum engine power and model year criterial in Table E of the appendix to [CI168] must comply with the emission standards in either Table A or Table D of the appendix. Compliance must be demonstrated according to one of the following methods:
  - 1. Purchase an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, for the same model year and maximum engine power.
  - 2. Keep records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in Subpart IIII.
  - 3. Keep records of engine manufacturer data indicating compliance with the standards.
  - 4. Keep records of control device vendor data indicating compliance with the standards.
  - 5. Conduct an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in 40 CFR §60.4212 as applicable.

Authority for Requirement: CI168

#### **Emission Point Characteristics**

The emission point shall conform to the specifications listed below.

**Table 60. Stack Characteristics** 

SEP	Stack Height (feet, above ground)	Discharge Style	Stack Opening (inches, dia.)	Temp (°F)	Flowrate (acfm)	Authority for Requirement
951	11	V	4	1,157	1,911	CI168

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.

<b>Monitoring Requirements</b>				
The owner/operator of this eq	uipment shall comply with the monitoring red	quirements listed	below.	
Agency Approved Operation	ns & Maintenance Plan Required?	Yes □	No 🖾	
Facility Maintained Operati	Facility Maintained Operation & Maintenance Plan Required?			
Compliance Assurance Mon	Compliance Assurance Monitoring (CAM) Plan Required?			
Authority for Requirement:	567 IAC 24.108(3)			

#### IV. General Conditions

This permit is issued under the authority of the Iowa Code subsection 455B.133(8) and in accordance with 567 Iowa Administrative Code (IAC) chapter 24 and Linn County Code of Ordinances (LCCO) Chapter 10 – Environment, Article III, Sec. 10-57. When 567 IAC as amended May 15, 2024, and cited in this permit becomes State Implementation Plan (SIP) approved, it will supersede 567 IAC as amended February 8, 2023. Prior to May 15, 2024, all Title V rule citations in this Title V permit were found and cited in 567 IAC Chapter 22. During the period from May 15, 2024, to the date that 567 IAC as amended May 15, 2024, is approved into the SIP, both 567 IAC as amended May 15, 2024, and 567 as amended February 8, 2023, for the legal basis for the applicable requirements included in this permit. A crosswalk showing the citation changes is attached to this permit in Appendix A.

## 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 24.108(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 24.105 (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 24.108 (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 24.108 (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 24.108 (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 24.108(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—24.105(455B). 567 IAC 24.116(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 24.105(2). 567 IAC 24.105

#### 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 24.107 (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 24.108 (15)"e"

## **G5. Semi-Annual Monitoring Report**

By March 31 and September 30 of each year, the permittee shall submit a report of any monitoring required under this permit for the 6 month periods of July 1 to December 31 and January 1 to June 30, respectively. All instances of deviations from permit requirements must be clearly identified in these reports, and the report must be signed by a responsible official, consistent with 567 IAC 24.107(4). The semi-annual monitoring report shall be submitted to the director and Linn County Public Health Air Quality Division. 567 IAC 24.108 (5)

### **G6.** Annual Fee

- 1. The permittee is required under subrule 567 IAC 24.106 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 24.115(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 24.108 (15)"b" and LCCO 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 24.108 (9)"e" and LCCO 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 21.8(1) and LCCO Sec. 10-67(b)

## 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;
- f. The operating conditions as existing at the time of sampling or measurement; and
- 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 24.108(4), 567 IAC 24.108(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 24;
  - b. Compliance test methods specified in 567 Chapter 21; 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 LCCO 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 24.108(6)

#### G13. Hazardous Release

The permittee must report any situation involving the actual, imminent, or probable release of a hazardous substance into the atmosphere which, because of the quantity, strength and toxicity of the substance, creates an immediate or potential danger to the public health, safety or to the environment. A verbal report

shall be made to the department at (515) 725-8694 and to the local police department or the office of the sheriff of the affected county as soon as possible but not later than six hours after the discovery or onset of the condition. This verbal report must be followed up with a written report as indicated in 567 IAC 131.2(2). 567 IAC Chapter 131-State Only

## G14. Excess Emissions and Excess Emissions Reporting Requirements

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

## 2. Excess Emissions Reporting

- a. Initial Reporting of Excess Emissions. An incident of excess emission (other than an incident of excess emission during a period of startup, shutdown, or cleaning) shall be reported to the appropriate field office of the department within eight hours of, or at the start of the first working day following the onset of the incident. The reporting exemption for an incident of excess emission during startup, shutdown or cleaning does not relieve the owner or operator of a source with continuous monitoring equipment of the obligation of submitting reports required in 567-subrule 25.1(6). An initial report of excess emission is not required for a source with operational continuous monitoring equipment (as specified in 567-subrule 25.1(1)) if the incident of excess emission continues for less than 30 minutes and does not exceed the applicable emission standard by more than 10 percent or the applicable visible emission standard by more than 10 percent opacity. The initial report may be made by electronic mail (E-mail), in person, or by telephone and shall include as a minimum the following:
  - i. The identity of the equipment or source operation from which the excess emission originated and the associated stack or emission point.
  - ii. The estimated quantity of the excess emission.
  - iii. The time and 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 27.1(1)-567 IAC 27.1(4) and LCCO Sec. 10-67

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 24.108(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 24.108(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 24.

- 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—24.140(455B) through 567—24.144(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
  - viii. Any permit term or condition no longer applicable as a result of the change. 567 IAC 24.110(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 24.110(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 24.110(3)
- 4. The permit shield provided in subrule 24.108(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 24.110(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 24.108(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 24.107(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 24.107(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 24.112(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.
  - a. 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 24, 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.
  - b. 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 24.111-567 IAC 24.113

#### **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 LCCO 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 LCCO 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. Exceedances 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 24.108(7)

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

- 1. The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a. All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance

- must bear the required warning statement if it is being introduced into interstate commerce pursuant to § 82.106.
- b. The placement of the required warning statement must comply with the requirements pursuant to § 82.108.
- c. The form of the label bearing the required warning statement must comply with the requirements pursuant to § 82.110.
- d. No person may modify, remove, or interfere with the required warning statement except as described in § 82.112.
- 2. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for MVACs in Subpart B:
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to § 82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
  - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to § 82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with reporting and recordkeeping requirements pursuant to § 82.166. ("MVAC-like appliance" as defined at § 82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to § 82.166.
- 3. If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant,
- 5. The permittee shall be allowed to switch from any ozone-depleting or greenhouse gas generating substances to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. 40 CFR part 82

## **G24. Permit Reopenings**

- 1. This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. 567 IAC 24.108(9)"c"
- 2. Additional applicable requirements under the Act become applicable to a major part 70 source with a remaining permit term of 3 or more years. Revisions shall be made as expeditiously as practicable, but not later than 18 months after the promulgation of such standards and regulations.

- a. Reopening and revision on this ground is not required if the permit has a remaining term of less than three years;
- b. Reopening and revision on this ground is not required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii) as amended to May 15, 2001.
- c. Reopening and revision on this ground is not required if the additional applicable requirements are implemented in a general permit that is applicable to the source and the source receives approval for coverage under that general permit. 567 IAC 24.108(17)"a", 567 IAC 24.108(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 24.114(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 24.114(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 24.114(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 24.108 (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 24.108 (8)

## **G27. Property Rights**

The permit does not convey any property rights of any sort, or any exclusive privilege. 567 IAC 24.108 (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 24.111(1). 567 IAC 24.111 (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 24.3(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:

Linn County Public Health Air Quality Division 1020 6th St. SE Cedar Rapids, IA 52401 (319) 892-6000

567 IAC 21.10(7)"a", 567 IAC 21.10(9) and LCCO 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 Air Permits and Compliance Branch 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 6200 Park Avenue Suite 200 Des Moines, IA 50321 (515) 313-8325

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 Division 1020 6th Street SE Cedar Rapids, IA 52401 (319) 892-6000

## Appendix A: 567 IAC Crosswalk

**Table 61. Crosswalk Chapters List** 

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
20	20 (Reserved)	Scope of Title – Definitions	N/A	<b>Definitions moved</b> to Ch. 21, 22, & 23
				Rescinded Ch. 20 (Reserved)
21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	Kept and Combined with rules from Ch. 24, 25, 26, & 29.
22	22	Controlling Pollution-Permits	Controlling Air Pollution – Construction Permitting	Kept construction permit rules and combined with Ch. 20 (definitions) and Ch. 28 (NAAQS)
				<b>Moved operating permit rules</b> to Ch. 24
22.100 – 22.300(12)	(New) 24	N/A	Operating Permits	Moved operating permit rules from Ch. 22 to Ch. 24
23	23	Emission Standards	Air Emission Standards	Kept
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21
2.5	21 \ 21			Moved TV rules here (to Ch. 24)
25	(New) 21	Emissions Measurement	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21
26	21 \ 21			Rescinded Ch. 25 (Reserved)
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21
27	27	Local Program Acceptance	Local Program Acceptance	Rescinded Ch. 26 (Reserved)  Kept
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22
				Rescinded Ch. 28 (Reserved)
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21
• •				Rescinded Ch. 29 (Reserved)
30	30	Fees	Fees	Kept
31	31	Nonattainment Areas	Nonattainment New Source Review	Kept

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
32	N/A	AFO Field Study	N/A	<b>Rescinded</b> Ch. 32 (Reserved)
33	33	Special regulations and construction permit requirements for major stationary sources—Prevention of Significant Deterioration (PSD) of air quality	Construction permit requirements for major stationary sources—Prevention of Significant Deterioration (PSD)	Kept
34	N/A	Emission Trading-CAIR-CAMR	N/A	Rescinded Ch. 34 (Reserved)
35	N/A	Grant Assistance Programs	N/A	Rescinded Ch 35 (Reserved)

**Table 62. Crosswalk Rules List** 

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
Chapter 20				
20	20 (Reserved)	Scope of Title - Definitions	N/A	<b>Definitions moved</b> to Ch. 21, 22 and 23
				Rescinded Ch. 20. (Reserved)
20.1	N/A	Scope of title	N/A	
20.2	Ch. 21, 22, 23	Definitions	Definitions	See beginning of Ch. 21, 22, and 23
20.3	N/A	Air quality forms generally	N/A	
Chapter 21				
21	21	Compliance	Compliance, Excess Emissions, and Measurement of Emissions	<b>Kept and combined</b> with rules from Chapters 24, 25, 26, and 29.
21.1	21.1	Compliance Schedule	Definitions and compliance requirements	Added definitions from Ch. 21, some language updated
21.2	21.2	Variances	Variances	Some language updated
21.3	21.3	Emission reduction program	Reserved	Reserved
21.4	21.4	Circumvention of rules	Circumvention of rules	Minor language updated
21.5	21.5	Evidence used in establishing that a violation has or is occurring	Evidence used in establishing that a violation has occurred or is occurring	21.5(2) Reserved, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
21.6	21.6	Temporary electricity generation for disaster situations	Temporary electricity generation for disaster situations	Minor language updated
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
N/A	21.9	N/A	Compliance with other requirements	New language
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3	N/A	Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
29.1	21.13	Methodology and qualified observer	Methodology and qualified observer	Moved from Ch. 29, some language updated
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Chapter 22				
22	22	Controlling Pollution-Permits	Controlling Air Pollution - Construction Permitting	<b>Kept construction permit rules and combined</b> with Ch. 20 (definitions) and Ch. 28 (NAAQS).
				Moved operating permit rules to Chapter 24.
22.1	22.1	Permits required for new or existing stationary sources	Definitions and permit requirements for new or existing stationary sources	Added definitions from Ch. 20, some language updated
22.2	22.2	Processing permit applications	Processing permit applications	
22.3	22.3	Issuing permits	Issuing permits	
22.4	22.4	Special requirements for major stationary sources located in areas designated attainment or unclassified (PSD)	Major stationary sources located in areas designated attainment or unclassified (PSD)	
22.5	22.5	Special requirements for nonattainment areas	Major stationary sources located in areas designated Nonattainment	
22.7	22.7	Alternative emission control program	Alternative emission control program	
22.8	22.8	Permit by rule	Permit by rule	
22.9	22.9	Special requirements for visibility protection	Special requirements for visibility protection	A lot of language updated or removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.10	22.10	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	Permitting requirements for country grain elevators, country grain terminal elevators, grain terminal elevators and feed mill equipment	
28.1	22.11	Ambient air quality standards - Statewide standards	Ambient air quality standards	Moved from Ch. 28, minor language updated
22.12 to 22.99	N/A	Reserved	N/A	Removed
22.100 - 22.300(12)	(New) 24	N/A	<b>Operating Permits</b>	<b>Moved operating permit rules</b> from Ch. 22 to Ch. 24.
22.100	24.100	Definitions for Title V operating permits	Definitions for Title V operating permits	Moved from Ch. 22, some language updated, many 40 CFR 70 definitions adopted by reference
22.101	24.101	Applicability of Title V operating permit requirements	Applicability of Title V operating permit requirements	Moved from Ch. 22, some language updated to correct punctuation and remove old dates
22.102	24.102	Source category exemptions	Source category exemptions	Moved from Ch. 22, some language updated to correct punctuation
22.103	24.103	Insignificant activities	Insignificant activities	Moved from Ch. 22, some language updated to correct typos and remove old dates
22.104	24.104	Requirement to have a Title V permit	Requirement to have a Title V permit	Moved from Ch. 22, some language updated no changes to rule text
22.105	24.105	Title V permit applications	Title V permit applications	Moved from Ch. 22, updated language to address electronic submissions and remove past application due dates
22.106	24.106	Annual Title V emissions inventory	Annual Title V emissions inventory	Moved from Ch. 22, no changes to rule text
22.107	24.107	Title V permit processing procedures	Title V permit processing procedures	Moved from Ch. 22, some language updated to update locations of public records and remove old CFR amendment dates

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.108	24.108	Permit content	Permit content	Moved from Ch. 22, some language updated to correct punctuation, remove old dates, and adopt 40 CFR 70 rules by reference
22.109	24.109	General permits	General permits	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.110	24.110	Changes allowed without a Title V permit revision (off- permit revisions)	Changes allowed without a Title V permit revision (off- permit revisions)	Moved from Ch. 22, some language updated to remove redundant language
22.111	24.111	Administrative amendments to Title V permits	Administrative amendments to Title V permits	Moved from Ch. 22, no changes to rule text
22.112	24.112	Minor Title V permit modifications	Minor Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.113	24.113	Significant Title V permit modifications	Significant Title V permit modifications	Moved from Ch. 22, no changes to rule text
22.114	24.114	Title V permit reopenings	Title V permit re-openings	Moved from Ch. 22 to Ch. 24, some language updated to adopt 40 CFR 70 rules by reference
22.115	24.115	Suspension, termination, and revocation of Title V permits	Suspension, termination, and revocation of Title V permits	Moved from Ch. 22, no changes to rule text
22.116	24.116	Title V permit renewals	Title V permit renewals	Moved from Ch. 22, no changes to rule text
22.117-22.119	24.117-24.119	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.120	24.120	Acid rain program— definitions	Acid rain program— definitions	Moved from Ch. 22, some language updated to remove old CFR amendment dates and address electronic submissions
22.121	24.121	Measurements, abbreviations, and acronyms	Reserved	Moved from Ch. 22, no changes to rule text
22.122	24.122	Applicability	Applicability	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.123	24.123	Acid rain exemptions	Acid rain exemptions	Moved from Ch. 22, some language updated to correct punctuation

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.124	24.124	Retired units exemption	Reserved	Moved from Ch. 22, no changes to rule text
22.125	24.125	Standard requirements	Standard requirements	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.126	24.126	Designated representative—submissions	Designated representative—submissions	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.127	24.127	Designated representative—objections	Designated representative—objections	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.128	24.128	Acid rain applications— requirement to apply	Acid rain applications— requirement to apply	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.130	24.130	Acid rain permit application shield and binding effect of permit application	Acid rain permit application shield and binding effect of permit application	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.131	24.131	Acid rain compliance plan and compliance options—general	Acid rain compliance plan and compliance options—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.132	24.132	Repowering extensions	Reserved	Moved from Ch. 22, no changes to rule text
22.133	24.133	Acid rain permit contents—general	Acid rain permit contents—general	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.134	24.134	Acid rain permit shield	Acid rain permit shield	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.135	24.135	Acid rain permit issuance procedures—general	Acid rain permit issuance procedures—general	Moved from Ch. 22, no changes to rule text
22.136	24.136	Acid rain permit issuance procedures—completeness	Acid rain permit issuance procedures—completeness	Moved from Ch. 22, no changes to rule text
22.137	24.137	Acid rain permit issuance procedures—statement of basis	Acid rain permit issuance procedures—statement of basis	Moved from Ch. 22, no changes to rule text
22.138	24.138	Issuance of acid rain permits	Issuance of acid rain permits	Moved from Ch. 22, some language updated to remove old dates and deadlines
22.139	24.139	Acid rain permit appeal procedures	Acid rain permit appeal procedures	Moved from Ch. 22, no changes to rule text

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.140	24.140	Permit revisions—general	Permit revisions—general	Moved from Ch. 22, some language updated to remove old dates
22.141	24.141	Permit modifications	Permit modifications	Moved from Ch. 22, no changes to rule text
22.142	24.142	Fast-track modifications	Fast-track modifications	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.143	24.143	Administrative permit amendment	Administrative permit amendment	Moved from Ch. 22, some language updated to remove fax option
22.144	24.144	Automatic permit amendment	Automatic permit amendment	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.145	24.145	Permit reopenings	Permit re-openings	Moved from Ch. 22, language updated to adopt 40 CFR 70 rules by reference
22.146	24.146	Compliance certification— annual report	Compliance certification—annual report	Moved from Ch. 22, no changes to rule text
22.147	24.147	Compliance certification— units with repowering extension plans	Reserved	Moved from Ch. 22, no changes to rule text
22.148	24.148	Sulfur dioxide opt-ins	Sulfur dioxide opt-ins	Moved from Ch. 22, some language updated to update the 40 CFR Part 74 amendment date
22.149 - 22.199	24.149 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
22.200	24.200 - 24.299	Definitions for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.201	24.200 - 24.299	Eligibility for voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.203	24.200 - 24.299	Voluntary operating permit applications	Reserved	Moved from Ch. 22, no changes to rule text
22.204	24.200 - 24.299	Voluntary operating permit fees	Reserved	Moved from Ch. 22, no changes to rule text
22.205	24.200 - 24.299	Voluntary operating permit processing procedures	Reserved	Moved from Ch. 22, no changes to rule text
22.206	24.200 - 24.299	Permit content	Reserved	Moved from Ch. 22, no changes to rule text

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
22.207	24.200 - 24.299	Relation to construction permits	Reserved	Moved from Ch. 22, no changes to rule text
22.208	24.200 - 24.299	Suspension, termination, and revocation of voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.209	24.200 - 24.299	Change of ownership for facilities with voluntary operating permits	Reserved	Moved from Ch. 22, no changes to rule text
22.210 - 22.299	24.200 - 24.299	Reserved	Reserved	Moved from Ch. 22, no changes to rule text
Chapter 23				
23	23	<b>Emission Standards</b>	Air Emission Standards	Kept
23.1	23.1	Emission standards	Emission standards	Kept, language updated, tables used
23.2	23.2	Open burning	Open burning	Kept, some language updated
23.3	23.3	Specific contaminants	Specific contaminants	Kept, some language updated
23.4	23.4	Specific processes	Specific processes	Kept, some language updated
23.5	23.5	Anaerobic lagoons	Anaerobic lagoons	Kept, some language updated
23.6	23.6	Alternative emission limits (the "bubble concept")	Reserved	Removed
Chapter 24				
24	(New) 21	Excess Emissions	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.  Moved operating permit rules here (to Ch. 24).
24.1	21.7	Excess emission reporting	Excess emission reporting	Moved from Ch. 24, some language updated
24.2	21.8	Maintenance and repair requirements	Maintenance and repair requirements	Moved from Ch. 24, some language updated
Chapter 25		•	•	
25	(New) 21	<b>Emissions Measurement</b>	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.  Rescinded Ch. 25. (Reserved)
25.1	21.10	Testing and sampling of new and existing equipment	Testing and sampling of new and existing equipment	Moved from Ch. 25, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
25.2	21.11	Continuous emission monitoring under the acid rain program	Continuous emission monitoring under the acid rain program	Moved from Ch. 25, some language updated
25.3		Mercury emissions testing and monitoring	N/A	Rescinded. Except 25.3(5)
25.3(5)	21.12	Affected sources subject to Section 112(g)	Affected sources subject to Section 112(g)	Moved from Ch. 25, some language updated
Chapter 26				
26	(New) 21	Emergency Air Pollution Episodes	Compliance, Excess Emissions, and Measurement of Emissions	Moved rules and combined with Ch. 21.  Rescinded Ch. 26. (Reserved)
26.1	21.14	Prevention of air pollution emergency episodes - General	Prevention of air pollution emergency episodes	Moved from Ch. 26, some language updated
26.2	21.15	Episode criteria	Episode criteria	Moved from Ch. 26, some language updated
26.3	21.16	Preplanned abatement strategies	Preplanned abatement strategies	Moved from Ch. 26, some language updated
26.4	21.17	Actions taken during episodes	Actions taken during episodes	Moved from Ch. 26, some language updated
Ch 26 Table III	Table I	Abatement strategies emission reduction actions alert level	Abatement strategies emission reduction actions alert level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table IV	Table II	Abatement strategies emission reduction actions warning level	Abatement strategies emission reduction actions warning level	Moved from Ch. 26, reference federal appendix table
Ch 26 Table V	Table III	Abatement strategies emission reduction actions emergency level	Abatement strategies emission reduction actions emergency level	Moved from Ch. 26, reference federal appendix table
Chapter 27				
27	27	Local Program Acceptance	Local Program Acceptance	Kept
27.1	27.1	General	General	Kept, some language updated
27.2	27.2	Certificate of acceptance	Certificate of acceptance	Kept, some language updated
27.3	27.3	Ordinance or regulations	Ordinance or regulations	Kept, some language updated

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
27.4	27.4	Administrative organization	Administrative organization	Kept, some language updated
27.5	27.5	Program activities	Program activities	Kept, some language updated
Chapter 28				
28	22	NAAQS	N/A	Moved rules and combined with Ch. 22.
				Rescinded Ch. 28. (Reserved)
28.1	22.11	Ambient air quality	Ambient air quality	Moved from Ch. 28, minor language
		standards - Statewide standards	standards	updated
		Startag		Rescinded Ch. 28. (Reserved)
Chapter 29				
29	(New) 21	Opacity Qualifications	Compliance, Excess Emissions, and Measurement	Moved rules and combined with Ch. 21.
			of Emissions	Rescinded Ch. 29. (Reserved)
29.1	21.13	Methodology and qualified	Methodology and qualified	Moved from Ch. 29, some language
		observer	observer	updated
Chapter 30	1			
30	30	Fees	Fee	Kept
30.1	30.1	Purpose	Purpose	Kept, language updated
30.2	30.2	Fees associated with new source review applications	Fees associated with new source review applications	Kept, some language updated
30.3	30.3	Fees associated with asbestos demolition or renovation notification	Fees associated with asbestos demolition or renovation notification	Kept, some language updated
30.4	30.4	Fees associated with Title V operating permits	Fees associated with Title V operating permits	Kept, some language updated
30.5	30.5	Fee advisory groups	Fee advisory groups	Kept, language updated
30.6	30.6	Process to establish or adjust fees and notification of fee rates	Process to establish or adjust fees and notification of fee rates	Kept, some language updated
30.7	30.7	Fee revenue	Reserved	Language removed
Chapter 31				
31	31	Nonattainment Areas	Nonattainment New Source Review	Kept

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
31.1	31.1	Permit requirements relating to nonattainment areas	Permit requirements relating to nonattainment areas	Kept, some language updated
31.2	31.2	Conformity of general federal actions to the Iowa state implementation plan or federal implementation plan - Rescinded	Reserved	Language removed
31.3	31.3	Nonattainment new source review requirements for areas designated nonattainment on or after May 18, 1998	Nonattainment new source review (NNSR) requirements for areas designated nonattainment	Kept, some language updated
31.4	31.4	Preconstruction review permit program	Preconstruction review permit program	Kept
31.5 - 31.8	31.5 - 31.8	Reserved	Reserved	Kept
31.9	31.9	Actuals PALs	Actuals PALs	Kept, some language updated
31.10	31.10	Validity of rules	Validity of rules	Kept
31.11 - 31.19	N/A	Reserved	N/A	Rescinded and removed
31.20	N/A	Special requirements for nonattainment areas designated before May 18, 1998	N/A	Rescinded and removed
Chapter 32				
32	N/A	AFO Field Study	N/A	Rescinded Ch. 32. (Reserved)
32.1	N/A	Animal feeding operations field study	N/A	Rescinded, reserved, and language removed
32.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
32.3	N/A	Exceedance of the health effects value (HEV) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed
32.4	N/A	Exceedance of the health effects standard (HES) for hydrogen sulfide	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken	
32.5	N/A	Iowa Air Sampling Manual	N/A	Rescinded, reserved, and language removed	
Chapter 33					
33	Special regulations and construction permit requirements for major stationary sources— Prevention of significant deterioration (PSD) of air quality		Construction permit requirements for major stationary sources— Prevention of significant deterioration (PSD)	Kept	
33.1	33.1	Purpose	Purpose	Kept, some language updated	
33.2	33.2	Reserved	Reserved	Kept	
33.3	33.3	Special construction permit requirements for major stationary sources in areas designated attainment or unclassified (PSD)	PSD construction permit requirements for major stationary sources	Kept, some language updated	
33.4 - 33.8	33.4 - 33.8	Reserved	Reserved	Kept	
33.9	33.9	Plantwide applicability limitations (PALs)	Plantwide applicability limitations (PALs)	Kept, some language updated	
33.10	33.10	Exceptions to adoption by reference	Exceptions to adoption by reference	Kept, some language updated	
Chapter 34					
34	N/A	Emissions Trading-CAIR-CAMR	N/A	Rescinded Ch. 34. (Reserved)	
34.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed	
34.2 - 34.199	N/A	Reserved	N/A	Rescinded, reserved, and language removed	
34.200	N/A	Provisions for air emissions trading and other requirements for the Clean Air Interstate Rule (CAIR) - rescinded	N/A	Rescinded, reserved, and language removed	

Previous Chapter # (Prior to 5/15/2024) Current Chapter #		Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken  Rescinded, reserved, and language removed	
34.201	N/A CAIR NOx annual tradii program general provision rescinded		N/A		
34.202	N/A	CAIR designated representative for CAIR NOx sources - rescinded	N/A	Rescinded, reserved, and language removed	
34.203	N/A	Permits - rescinded	N/A	Rescinded, reserved, and language removed	
34.204	N/A	Reserved	N/A	Rescinded, reserved, and language removed	
34.205	N/A	CAIR NOx allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed	
34.206	N/A			Rescinded, reserved, and language removed	
34.207	N/A	CAIR NOx allowance N/A transfers - rescinded		Rescinded, reserved, and language removed	
34.208	N/A Monitoring and rescinded	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and languag removed	
34.209	N/A	CAIR NOx opt-in units - rescinded	N/A	Rescinded, reserved, and language removed	
34.210	N/A	CAIR SO2 trading program - rescinded	N/A	Rescinded, reserved, and language removed	
34.211 - 34.219	N/A	Reserved	N/A	Rescinded, reserved, and language removed	
34.220	N/A	CAIR NOx ozone season trading program - rescinded	N/A	Rescinded, reserved, and language removed	
34.221	N/A	CAIR NOx ozone season trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed	
34.222	N/A	CAIR designated representative for CAIR NOx ozone season sources - rescinded	N/A	Rescinded, reserved, and language removed	

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken	
34.223	N/A	CAIR NOx ozone season permits - rescinded	N/A	Rescinded, reserved, and language removed	
34.224	N/A	Reserved N/A		Rescinded, reserved, and language removed	
34.225	N/A	CAIR NOx ozone season allowance allocations - rescinded		Rescinded, reserved, and language removed	
34.226	N/A	CAIR NOx ozone season allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed	
34.227	N/A	CAIR NOx ozone season allowance transfers - rescinded	N/A	Rescinded, reserved, and language removed	
34.228	N/A	CAIR NOx ozone season monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed	
34.229	N/A			Rescinded, reserved, and language removed	
34.230 - 34.299	N/A	Reserved N/A		Rescinded, reserved, and language removed	
34.300	N/A Provisions for air emis trading and other requirements for the C Air Mercury Rule (CA rescinded		removed n		
34.301	N/A	Mercury (Hg) budget trading program general provisions - rescinded	N/A	Rescinded, reserved, and language removed	
34.302	N/A			Rescinded, reserved, and language removed	
34.303	N/A	General Hg budget trading program permit requirements - rescinded	N/A	Rescinded, reserved, and language removed	

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
34.304	N/A	Hg allowance allocations - rescinded	N/A	Rescinded, reserved, and language removed
34.305	N/A	Hg allowance tracking system - rescinded	N/A	Rescinded, reserved, and language removed
34.307	N/A	Monitoring and reporting - rescinded	N/A	Rescinded, reserved, and language removed
34.308	N/A	Performance specifications - rescinded	N/A	Rescinded, reserved, and language removed
Chapter 35				
35	N/A	Grant Assistance Programs	N/A	Rescinded Ch. 35. (Reserved)
35.1	N/A	Purpose	N/A	Rescinded, reserved, and language removed
35.2	N/A	Definitions	N/A	Rescinded, reserved, and language removed
35.3	N/A	Role of the department of natural resources	N/A	Rescinded, reserved, and language removed
35.4	N/A	Eligible projects	N/A	Rescinded, reserved, and language removed
35.5	N/A	Forms N/A		Rescinded, reserved, and language removed
N/A Project		Project selection	N/A	Rescinded, reserved, and language removed
N/A Fund		Funding sources	N/A	Rescinded, reserved, and language removed
35.8	N/A Type of		N/A	Rescinded, reserved, and language removed
35.9	N/A Term of loans		N/A Rescinded, reserved, and removed	
35.10	N/A	Reduced award	N/A	Rescinded, reserved, and language removed
35.11	N/A	Fund disbursement limitations	N/A	Rescinded, reserved, and language removed
35.12	N/A	Applicant cost share	N/A	Rescinded, reserved, and language removed

Previous Chapter # (Prior to 5/15/2024)	Current Chapter #	Previous Title & Description (Prior to 5/15/2024)	Current Title & Description	Action Taken
35.13	N/A	Eligible costs	N/A	Rescinded, reserved, and language removed
35.14	N/A	Ineligible costs	N/A	Rescinded, reserved, and language removed
35.15	N/A	Written agreement	N/A	Rescinded, reserved, and language removed

### **Appendix B: Applicable Federal Standards**

A list of 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 and NESHAP can be found at the link below:

https://www.epa.gov/caa-permitting/air-technology-standards-region-7

#### 40 CFR Part 60 - New Source Performance Standards

**Subpart A** – General Provisions

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-A?toc=1

**Subpart Dc** – Standards of Performance for Small Industrial, Commercial, Institutional Steam Generating Units

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-Dc?toc=1

**Subpart O** – Standards of Performance for Sewage Treatment Plants

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-O?toc=1

**Subpart IIII** – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-IIII?toc=1

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-60/subpart-JJJJ?toc=1

#### 40 CFR Part 61 – National Emission Standards for Hazardous Air Pollutants

**Subpart E** – National Emission Standard for Mercury

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-61/subpart-E

### 40 CFR Part 62 – Federal Plan Requirements for Sewage Sludge Incineration Units

**Subpart LLL** – Federal Plan Requirements for Sewage Sludge Incineration Units Constructed on or before October 14, 2010

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-62/subpart-LLL

#### 40 CFR Part 63 – National Emission Standards for Hazardous Air Pollutants

**Subpart** A – General Provisions

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-A

**Subpart ZZZZ** – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ

**Subpart JJJJJJ** – National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-JJJJJJ

# **40 CFR Subchapter O – Sewage Sludge**

Part 503 – Standards for the Use or Disposal of Sewage Sludge

https://www.ecfr.gov/current/title-40/chapter-I/subchapter-O/part-503

### **Appendix C: Opacity Monitoring Summary**

The facility shall check the opacity weekly during a period when the emission unit listed in Table 63 are 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 (5) 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 (8) 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 from emission units listed in Table 63, this would be a violation and corrective action will be taken as soon as possible, but no later than eight (8) 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.

**Table 63. Opacity Monitoring** 

EP ID	EU ID	Opacity Limit
013	013-1 013-1B 300-1 300-2	20%
015	015-1	20%
016	016-1	20%
017	017-1	20%
021	021-1	20%
022	022-1	20%
034	034-1	20%

Authority for Requirement: 567 IAC 22.108(14)

## **Appendix D: Stack Testing Summary**

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

**Table 64. Stack Testing Summary** 

EP ID	Description	Pollutant	Deadline	Test Method
012	Biotrickling Filter #2	H <sub>2</sub> S	Periodic <sup>1,2</sup>	40 CFR 60, Appendix A, Method 15
		PM	6/13/26 6/13/28	40 CFR 60, Appendix A, Method 5
	Incinerator <sup>3</sup>	PM <sub>10</sub>	6/13/26 6/13/28	40 CFR 60, Appendix A, Method 5 40 CFR 60, Appendix M, Method 202
013		SO <sub>2</sub>	6/13/26 6/13/28	40 CFR 60, Appendix A, Method 6C
		NO <sub>X</sub>	6/13/26 6/13/28	40 CFR 60, Appendix A, Method 7E
		VOC	6/13/26	40 CFR 60, Appendix A, Method 320 or 40 CFR 60, Appendix A, Method 18
		СО	6/13/26	40 CFR 60, Appendix A, Method 10
019	Solids Handling Odorous Air	H <sub>2</sub> S	Periodic <sup>2,4</sup>	40 CFR 60, Appendix A, Method 15
036	MCC1 Standby Generator (Main Lift)	СО	Periodic <sup>5</sup>	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
037	Standby Generator (Solids Dewatering)	СО	Periodic <sup>5</sup>	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
040	Standby Generator (#3N Final Lift)	СО	Periodic <sup>5</sup>	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
041	Standby Generator (#7S Final Lift)	СО	Periodic <sup>5</sup>	40 CFR 60, Appendix A, Method 10 or ASTM D6522-00
050	Biotrickling Filter #1	H <sub>2</sub> S	Periodic <sup>6</sup>	40 CFR 60, Appendix A, Method 15
051	Bio-Scrubber #1	H <sub>2</sub> S	Periodic <sup>7</sup>	40 CFR 60, Appendix A, Method 15
052	Bio-Scrubber #2	H <sub>2</sub> S	Periodic <sup>7</sup>	40 CFR 60, Appendix A, Method 15

<sup>&</sup>lt;sup>1</sup> 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 a compliance demonstration and reset the periodic testing requirement of LCPH ATI 7047R1 / PTO 7208.

<sup>&</sup>lt;sup>2</sup> 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 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 limits shall be completed while the biotrickling filter is operating under scenario #4 at the same time as the EP019 compliance demonstration test.

<sup>&</sup>lt;sup>3</sup> Compliance demonstrations for PM, PM<sub>10</sub>, SO<sub>2</sub>, and NO<sub>x</sub> completed to comply with 40 CFR Part 60, Subpart O; 40 CFR Part 61, Subpart E; 40 CFR Part 62, Subpart LLL; and 40 CFR Part 503, Subchapter O, Subpart E will satisfy these testing requirements. Pursuant to 567 IAC 25.1(7) and LCCO Sec. 10-70(e), copies of stack tests to be used to satisfy these requirements shall be submitted to the Iowa DNR and Linn County Public Health.

<sup>&</sup>lt;sup>4</sup> This test shall be performed at the same time as the EP012 compliance demonstration test.

Authority for Requirement: 567 IAC 24.108(3)

LCPH ATI 7047R1 / PTO 7208 LCPH ATI 7048 / PTO 7204 LCPH ATI 7037R1 / PTO 7205 LCPH ATI 7038 / PTO 7206R1 LCPH ATI 7039 / PTO 7207R1 40 CFR Part 63, Subpart ZZZZ 567 IAC 23.1(4)"cz"

LCCO Sec. 10-62(d)(104)

<sup>&</sup>lt;sup>5</sup> Pursuant to 40 CFR §63.6615 and Table 3 to NESHAP Subpart ZZZZ, 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

<sup>&</sup>lt;sup>6</sup> Stack testing is required after each biotrickling filter media exchange and every five (5) years thereafter.

<sup>&</sup>lt;sup>7</sup> 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.